

# **2018 Annual American Control Conference (ACC 2018)**

**Milwaukee, Wisconsin, USA  
27-29 June 2018**

**Pages 1-720**



**IEEE Catalog Number: CFP18ACC-POD  
ISBN: 978-1-5386-5429-3**

**Copyright © 2018, American Automatic Control Council (AACC)  
All Rights Reserved**

***\*\*\* This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP18ACC-POD
ISBN (Print-On-Demand):	978-1-5386-5429-3
ISBN (Online):	978-1-5386-5428-6
ISSN:	0743-1619

**Additional Copies of This Publication Are Available From:**

Curran Associates, Inc  
57 Morehouse Lane  
Red Hook, NY 12571 USA  
Phone: (845) 758-0400  
Fax: (845) 758-2633  
E-mail: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

CURRAN ASSOCIATES INC.  
**proceedings**  
.com

# TABLE OF CONTENTS

<b>NON-INTRUSIVE INDIRECT ADAPTIVE CONTROL OF AN UNCERTAIN GASOLINE ENGINE THREE-WAY CATALYST</b> .....	1
<i>Mario Santillo ; E. Dogan Sumer</i>	
<b>MODEL-BASED CONTROL OF AUTOMOTIVE SELECTIVE CATALYTIC REDUCTION SYSTEMS WITH ROAD GRADE PREVIEW</b> .....	7
<i>Yao Ma ; Junmin Wang</i>	
<b>WASTE ENERGY RECOVERY THROUGH TURBO GENERATION: “UNEXPECTED FUEL EFFICIENCY SWEET SPOT FOR TRANSIENT CONTROL.”</b> .....	13
<i>Shima Nazari ; Rani Kiwan ; Jason Siegel ; Anna Stefanopoulou</i>	
<b>NON-UNIFORM CYLINDER-TO-CYLINDER COMBUSTION FOR AMMONIA GENERATION IN A NEW PASSIVE SCR SYSTEM</b> .....	19
<i>Pingen Chen ; Qinghua Lin ; Vitaly Y. Prikhodko ; James E Parks</i>	
<b>SLIDING-MODE CONTROL OF AMMONIA COVERAGE RATIO FOR AUTOMOTIVE SELECTIVE CATALYTIC REDUCTION SYSTEMS</b> .....	25
<i>Yao Ma ; Junmin Wang</i>	
<b>NON-UNIFORM CYLINDER-TO-CYLINDER COMBUSTION FOR COST-EFFECTIVE LEAN NOXTRAP REGENERATION</b> .....	31
<i>Qinghua Lin ; Pingen Chen</i>	
<b>DISTRIBUTED ADAPTIVE ATTITUDE CONTROL FOR MULTIPLE UNDERACTUATED FLEXIBLE SPACECRAFT</b> .....	37
<i>Ti Chen ; Jinjun Shan</i>	
<b>A FOLLOWER-BASED CONTROL ALLOCATION IN MULTI-AGENT NETWORKS</b> .....	43
<i>David Buzorgnia ; Amir G. Aghdam</i>	
<b>ONLINE FEEDFORWARD/FEEDBACK STRUCTURE ADAPTATION FOR HETEROGENEOUS CACC STRINGS</b> .....	49
<i>Carlos Flores ; Vicente Milanés ; Fawzi Nashashibi</i>	
<b>DISTRIBUTED CONSENSUS OF EULER-LAGRANGE SYSTEMS UNDER SWITCHING DIRECTED GRAPHS</b> .....	56
<i>Abdelkader Abdessameud</i>	
<b>BEACON-REFERENCED MUTUAL PURSUIT IN THREE DIMENSIONS</b> .....	62
<i>Kevin S. Galloway ; Biswadip Dey</i>	
<b>OPTIMAL TARGET CAPTURE STRATEGIES IN THE TARGET-ATTACKER-DEFENDER DIFFERENTIAL GAME</b> .....	68
<i>Eloy Garcia ; David W. Casbeer ; Meir Pachter</i>	
<b>SWITCHED MRAC WITH IMPROVED PERFORMANCE USING SEMI-INITIAL EXCITATION</b> .....	74
<i>Sayan Basu Roy ; Shubhendu Bhasin</i>	
<b>ADAPTIVE CONTROL OF LINEAR SYSTEMS WITH TIME-VARYING PARAMETERS</b> .....	80
<i>Kaiwen Chen ; Alessandro Astolfi</i>	
<b>SIMPLE ADAPTIVE CONTROL STRATEGY APPLIED TO REDUCE RESPONSE OF BRIDGE STRUCTURE SUBJECTED TO CHANGES IN PLANT</b> .....	86
<i>Rachel W. Soares ; Luciana R. Barroso ; Omar A. S. Al-Fahdawi</i>	
<b>MODEL REFERENCE ADAPTIVE CONTROL DURING MODE TRANSITION OF A PARALLEL HYBRID ELECTRIC VEHICLE</b> .....	92
<i>Cheng Peng ; Li Chen ; Jing Sun</i>	
<b>ONLINE OPTIMAL CONTROL OF WAVE ENERGY CONVERTERS VIA ADAPTIVE DYNAMIC PROGRAMMING</b> .....	98
<i>Jing Na ; Siyuan Zhan ; Guang Li</i>	
<b>ADAPTIVE CONTROL OF A PROPORTIONAL FLOW VALVE FOR CRITICAL CARE VENTILATORS</b> .....	104
<i>Mike Borrello</i>	
<b>NON-OVERLAPPING DOMAIN DECOMPOSITION METHODS FOR COMPUTATIONALLY EFFICIENT ESTIMATION OF PARABOLIC PDES WITH MOBILE SENSORS</b> .....	110
<i>Michael A. Demetriou</i>	
<b>BANG-BANG FREE BOUNDARY CONTROL OF A STEFAN PROBLEM FOR METALLURGICAL LENGTH MAINTENANCE</b> .....	116
<i>Zhelin Chen ; Joseph Bentsman ; Brian G. Thomas</i>	

<b>PARAMETER ESTIMATION OF A THERMAL FLUID SYSTEM</b> .....	122
<i>John A. Burns ; Eugene M. Cliff ; Terry L. Herdman</i>	
<b>COMPENSATION OF A CLASS OF INFINITE-DIMENSIONAL ACTUATOR DYNAMICS WITHOUT DISTRIBUTED FEEDBACK</b> .....	128
<i>Ricardo Sanz ; Pedro Garcia ; Miroslav Krstic</i>	
<b>LOW-COMPLEXITY MODELING OF MODE INTERACTIONS IN BOUNDARY LAYER FLOWS</b> .....	134
<i>Wei Ran ; Armin Zare ; M. J. Philipp Hack ; Mihailo R. Jovanovic</i>	
<b>EVENT-DRIVEN BOUNDARY CONTROL FOR TIME FRACTIONAL DIFFUSION SYSTEMS UNDER TIME-VARYING INPUT DISTURBANCE</b> .....	140
<i>Fudong Ge ; Yangquan Chen</i>	
<b>STEALTHY ATTACKS IN CLOUD-CONNECTED LINEAR IMPULSIVE SYSTEMS</b> .....	146
<i>Alessandra Duz ; Sean Phillips ; Adriano Fagiolini ; Ricardo G. Sanfelice ; Fabio Pasqualetti</i>	
<b>ANOMALY DETECTOR METRICS FOR SENSOR DATA ATTACKS IN CONTROL SYSTEMS</b> .....	153
<i>David Umsonst ; Henrik Sandberg</i>	
<b>COMPRESSIVE SENSING IN FAULT DETECTION</b> .....	159
<i>Farhad Farokhi ; Iman Shames</i>	
<b>SET-THEORETIC DETECTION OF BIAS INJECTION CYBER-ATTACKS ON NETWORKED POWER SYSTEMS</b> .....	165
<i>Efstathios Kontouras ; Anthony Tzes ; Leonidas Dritsas</i>	
<b>STATE-SECREC Y CODES FOR STABLE SYSTEMS</b> .....	171
<i>Anastasios Tsiamis ; Konstantinos Gatsis ; George J. Pappas</i>	
<b>ON REACHABLE SETS OF HIDDEN CPS SENSOR ATTACKS</b> .....	178
<i>Carlos Murguía ; Justin Ruths</i>	
<b>LIMITATIONS AND TRADEOFFS IN MINIMUM INPUT SELECTION PROBLEMS</b> .....	185
<i>Ali Jadbabaie ; Alex Olshevsky ; Milad Siami</i>	
<b>STABILITY ANALYSIS OF COMPLEX NETWORKS WITH LINEAR-THRESHOLD RATE DYNAMICS</b> .....	191
<i>Erfan Nozari ; Jorge Cortés</i>	
<b>SENSING-CONSTRAINED LQG CONTROL</b> .....	197
<i>Vasileios Tzoumas ; Luca Carlone ; George J. Pappas ; Ali Jadbabaie</i>	
<b>PERFORMANCE BOUNDS FOR OPTIMAL FEEDBACK CONTROL IN NETWORKS</b> .....	203
<i>Tyler Summers ; Justin Ruths</i>	
<b>THE ROBUST MINIMAL CONTROLLABILITY PROBLEM FOR SWITCHED LINEAR CONTINUOUS-TIME SYSTEMS</b> .....	210
<i>Guilherme Ramos ; Sérgio Pequito ; Carlos Caleiro</i>	
<b>FRAGILITY AND CONTROLLABILITY TRADEOFF IN COMPLEX NETWORKS</b> .....	216
<i>Fabio Pasqualetti ; Chiara Favaretto ; Shiyu Zhao ; Sandro Zampieri</i>	
<b>AN IRL APPROACH FOR CYBER-PHYSICAL ATTACK INTENTION PREDICTION AND RECOVERY</b> .....	222
<i>Mahmoud Elnaggar ; Nicola Bezzo</i>	
<b>DESIGNING INPUT SHAPERS USING REINFORCEMENT LEARNING</b> .....	228
<i>Minh Vu ; Daniel Newman ; Joshua Vaughan</i>	
<b>SYNCHRONOUS ADVERSARIAL FEATURE LEARNING FOR LIDAR BASED LOOP CLOSURE DETECTION</b> .....	234
<i>Peng Yin ; Yuqing He ; Lingyun Xu ; Yan Peng ; Jianda Han ; Weiliang Xu</i>	
<b>A POLICY SEARCH METHOD FOR TEMPORAL LOGIC SPECIFIED REINFORCEMENT LEARNING TASKS</b> .....	240
<i>Xiao Li ; Yao Ma ; Calin Belta</i>	
<b>ADAPTIVE PROBABILISTIC CLASSIFICATION OF DYNAMIC PROCESSES: A CASE STUDY ON HUMAN TRUST IN AUTOMATION</b> .....	246
<i>Kumar Akash ; Tahira Reid ; Neera Jain</i>	
<b>LEARNING OPTION MDPS FROM SMALL DATA</b> .....	252
<i>Ashkan Zehfroosh ; Herbert G. Tanner ; Jeffrey Heinz</i>	
<b>COUNTEREXAMPLES TO PARAMETRIC CONVERGENCE IN RECURSIVE NETWORKED IDENTIFICATION</b> .....	258
<i>Sholeh Yasini ; Torbjörn Wigren</i>	
<b>ESTIMATION OF NOISE MEANS AND COVARIANCE MATRICES FOR LINEAR TIME-VARYING MODELS</b> .....	265
<i>Oliver Kost ; Jindrich Duník ; Ondrej Straka</i>	

<b>COMBINING SUBSYSTEM AND FULL SYSTEM DATA WITH APPLICATION TO COLD-FORMED STEEL SHEAR WALL</b> .....	272
<i>Long Wang ; Guanbo Bian ; James C. Spall ; Benjamin W. Schafer</i>	
<b>EXPERIMENTAL IDENTIFICATION OF THE SPATIAL SPILLOVER OPERATOR FOR SYSTEMS WITH INSUPPRESSIBLE DISTURBANCES</b> .....	278
<i>Sneha Sanjeevini ; Khaled F. Aljanaideh ; Antai Xie ; Dennis S. Bernstein</i>	
<b>TIME VARYING COVARIANCE EQUIVALENT REALIZATIONS</b> .....	283
<i>Manoranjan Majji</i>	
<b>REGULATION OF CONTAGION ALONG A QUEUE OF EMOTIONAL AGENTS</b> .....	288
<i>Joseph Kempel ; David Bridget ; Sachit Butail</i>	
<b>N-(<math>K_1, K_2</math>)-DETECTABILITY OF DISCRETE EVENT SYSTEMS UNDER NONDETERMINISTIC OBSERVATIONS</b> .....	294
<i>Lei Zhou ; Shaolong Shu ; Feng Lin</i>	
<b>AUTOMATED MULTI-TARGET TRACKING IN PUBLIC TRAFFIC IN THE PRESENCE OF DATA ASSOCIATION UNCERTAINTY</b> .....	300
<i>Andinet Hunde ; Beshah Ayalew</i>	
<b>AN ADAPTIVE LUENBERGER OBSERVER FOR SPEED-SENSORLESS ESTIMATION OF INDUCTION MACHINES</b> .....	307
<i>Jie You ; Wencen Wu ; Yebin Wang</i>	
<b>DISCRETE STATE ESTIMATION WITH PERSISTENT SENSOR FAULTS AND NON-PERSISTENT NOISE VIA NOISY BAYESIAN ACTIVE DIAGNOSIS</b> .....	313
<i>Sze Zheng Yong ; Necmiye Ozay</i>	
<b>ON THE FEASIBILITY OF A TEMPERATURE STATE OBSERVER FOR POWDER BED FUSION ADDITIVE MANUFACTURING</b> .....	321
<i>Nathaniel Wood ; David J. Hoelzle</i>	
<b>FEEDBACK PARTICLE FILTER DESIGN USING A DIFFERENTIAL-LOSS REPRODUCING KERNEL HILBERT SPACE</b> .....	329
<i>Anand Radhakrishnan ; Sean Meyn</i>	
<b>A KOOPMAN OPERATOR APPROACH FOR COMPUTING AND BALANCING GRAMIANS FOR DISCRETE TIME NONLINEAR SYSTEMS</b> .....	337
<i>Enoch Yeung ; Zhiyuan Liu ; Nathan O. Hodas</i>	
<b>AUTOMATED GRADING WITH A SOFTWARE-CHECKING PROGRAM IN THE SYSTEM DYNAMICS AND CONTROL CURRICULUM</b> .....	345
<i>R. C. Hill ; Yasha Parvini</i>	
<b>SMALL GROUP LEARNING ACTIVITIES IN SYSTEMS AND CONTROL THEORY USING FIDGET CARS</b> .....	352
<i>Laura Ray ; David Hodgson ; David Feinauer ; Raina White ; Annett Gawerc ; Prudence Merton ; Devin Montgomery ; Blair Allison ; Nathan Amanquah ; Charles Jackson ; Fred Mcbagonluri ; Paul Shiue ; Eric Welch ; Kevin Huang ; Carlos Luck ; Jonathan West ; Vanessa Svihla ; Joshua Murphy ; Daniel Ray</i>	
<b>CLOSED FORM EXPRESSIONS FOR THE MATRIX EXPONENTIAL AND SOLUTIONS TO STATE EQUATIONS BASED ON A FUNDAMENTAL SOLUTION</b> .....	360
<i>Anna Soffía Hauksdóttir ; Sven Þ. Sigurðsson</i>	
<b>THE LAST JEDI: STEP RESPONSE IDENTIFICATION OF OVERDAMPED SECOND ORDER SYSTEMS</b> .....	368
<i>William C. Messner</i>	
<b>MODE-DEPENDENT CONTROL DESIGN FOR DISCRETE-TIME SWITCHED SINGULAR SYSTEMS WITH TIME VARYING DELAY</b> .....	374
<i>Mohamed Amin Regaieg ; Mourad Kchaou ; Ahmed El-Hajjaji ; Hamdi Gassara ; Mohamed Chaabane</i>	
<b>A CONTROL ENGINEERING AND SYSTEM IDENTIFICATION APPROACH TO IMPROVE A COCOA BIOFERTILIZATION PROCESS</b> .....	380
<i>Victor Gallino ; César A. Martín ; Daynet Sosa ; Milton Barcos-Arias</i>	
<b>PROCESS-AWARE SIDE CHANNEL SHAPING AND WATERMARKING FOR CYBER-PHYSICAL SYSTEMS</b> .....	386
<i>P. Krishnamurthy ; F. Khorrami ; R. Karri ; H. Salehghaffari</i>	
<b>TRIPLE-INTEGRAL CONTROL FOR REDUCED-G ATMOSPHERIC FLIGHT</b> .....	392
<i>Juan-Pablo Afman ; Eric Feron ; John Hauser</i>	
<b>SYNTHESIZED DISTURBANCE OBSERVER FOR VEHICLE LATERAL DISTURBANCE REJECTION</b> .....	398
<i>Shiyong Zhou ; Minghui Zheng ; Fu Zhang ; Masayoshi Tomizuka</i>	
<b>DISCRETE-TIME SPREAD PROCESSES: ANALYSIS, IDENTIFICATION, AND VALIDATION</b> .....	404
<i>Philip E. Paré ; Barrett E. Kirwan ; Ji Liu ; Tamer Basar ; Carolyn L. Beck</i>	

<b>CLOSED-FORM SOLUTION AND SPARSITY PATH FOR INVERSE COVARIANCE ESTIMATION PROBLEM</b> .....	410
<i>Salar Fattahi ; Somayeh Sojoudi</i>	
<b>AN ARCHITECTURE FOR CONTROLLER PARAMETERIZATION</b> .....	418
<i>Henrik Niemann</i>	
<b>ON COMPUTATION OF NUMERICAL SOLUTIONS TO HAMILTON-JACOBI INEQUALITIES USING GAUSSIAN PROCESS REGRESSION</b> .....	424
<i>Kenji Fujimoto ; Hirofumi Beppu ; Yuji Takaki</i>	
<b>ON THE LIE ALGEBRA OF A LINEAR IMPULSIVE SYSTEM</b> .....	430
<i>Nghi Nguyen ; Douglas A. Lawrence</i>	
<b>DATA-DRIVEN APPROACH FOR INFERRING CAUSALITY AND NETWORK TOPOLOGY</b> .....	436
<i>Subhrajit Sinha ; Umesh Vaidya</i>	
<b>NEW RESULTS ON FINITE-TIME STABILITY: GEOMETRIC CONDITIONS AND FINITE-TIME CONTROLLERS</b> .....	442
<i>Kunal Garg ; Dimitra Panagou</i>	
<b>ANALYSIS OF CLUSTER CONSENSUS IN CONTINUOUS-TIME NETWORKS</b> .....	448
<i>Ümit Develer ; Mehmet Akar</i>	
<b>PRACTICAL SYNCHRONIZATION OF HETEROGENEOUS MULTI-AGENT SYSTEM USING ADAPTIVE LAW FOR COUPLING GAINS</b> .....	454
<i>Seungjoon Lee ; Hyeonjun Yun ; Hyungbo Shim</i>	
<b>STABLE DISTRIBUTED ADAPTIVE SYSTEMS FOR CONTROL OF LINEAR MULTIAGENT SYSTEMS IN THE PRESENCE OF HETEROGENEOUS ACTUATOR DYNAMICS AND UNKNOWN PARAMETERS</b> .....	460
<i>K. Merve Dogan ; Benjamin C. Gruenwald ; Tansel Yucelen ; Jonathan A. Muse ; Eric A. Butcher</i>	
<b>INDEX-FREE ASSIGNMENT FORMATION OF NETWORKED MULTI-AGENT SYSTEMS</b> .....	466
<i>Kazunori Sakurama ; Hyo-Sung Ahn</i>	
<b>DISTRIBUTED RANDOMIZED ALGORITHMS FOR PAGERANK BASED ON A NOVEL INTERPRETATION</b> .....	472
<i>Atsushi Suzuki ; Hideaki Ishii</i>	
<b>LEADER-FOLLOWER TRACKING CONTROL FOR MULTI-AGENT SYSTEMS BASED ON INPUT OBSERVER DESIGN</b> .....	478
<i>Chuan Yan ; Huazhen Fang</i>	
<b>A PAGERANK ALGORITHM BASED ON ASYNCHRONOUS GAUSS-SEIDEL ITERATIONS</b> .....	484
<i>Daniel Silvestre ; João Hespanha ; Carlos Silvestre</i>	
<b>LQ CONTROL DURING CLUTCH ENGAGEMENT FOR AUTOMATIC TRANSMISSIONS</b> .....	490
<i>Xiaoxuan Cheng ; Li Chen ; Dongxu Li ; Fengyu Liu</i>	
<b>LEADER-FOLLOWER CONSENSUS OF ROBOTIC MANIPULATORS IN TASK SPACE WITH UNCERTAINTIES AND VARYING COMMUNICATION DELAYS</b> .....	496
<i>Xuhui Lu ; Yingmin Jia ; Fumitoshi Matsuno</i>	
<b>DECENTRALIZED CONTROL OF SWITCHED-SYSTEMS WITH PATH-DEPENDENT L<sub>2</sub>-INDUCED BOUNDS</b> .....	502
<i>Joao P. Jansch-Porto ; Geir E Dullerud</i>	
<b>MODELING AND CONTROL OF AN AERIAL ROBOCRANE USING A WIRE DRIVEN SYSTEM</b> .....	508
<i>Fida Ben Abdallah ; Naoufel Azouz ; Lotfi Beji ; Salim Hima ; Azgal Abichou</i>	
<b>ON-LINE SYNERGY IDENTIFICATION FOR PERSONALIZED ACTIVE ARM PROSTHESIS: A FEASIBILITY STUDY</b> .....	514
<i>Riccardo Garcia-Rosas ; Ying Tan ; Denny Oetomo ; Chris Manzie</i>	
<b>CONTROL-ORIENTED LEARNING OF LAGRANGIAN AND HAMILTONIAN SYSTEMS</b> .....	520
<i>Mohamadreza Ahmadi ; Ufuk Topcu ; Clarence Rowley</i>	
<b>IO LINEARIZATION, STABILITY, AND CONTROL OF AN INPUT NON-AFFINE THERMOELECTRIC SYSTEM</b> .....	526
<i>Koen Bos ; Dennis Heck ; Marcel Heertjes ; Robert Van Der Kall</i>	
<b>SWITCHING CONTROL OF MEDICAL VENTILATION SYSTEMS</b> .....	532
<i>Nathan Van De Wouw ; Bram Hunnekens ; Sjors Kamps</i>	
<b>HYBRID PID CONTROL FOR TRANSIENT PERFORMANCE IMPROVEMENT OF MOTION SYSTEMS WITH FRICTION</b> .....	539
<i>R. Beerens ; A. Bisoffi ; L. Zaccarian ; W.P.M.H. Heemels ; H. Nijmeijer ; N. Van De Wouw</i>	
<b>BEYOND THE WATERBED EFFECT: DEVELOPMENT OF FRACTIONAL ORDER CRONE CONTROL WITH NON-LINEAR RESET</b> .....	545
<i>Linda Chen ; Niranjana Saikumar ; Simone Baldi ; S. Hassan Hosseinnia</i>	

<b>RESET CONTROL OF BOOST CONVERTERS .....</b>	<b>553</b>
<i>Umnikrishnan Raveendran Nair ; Ramon Costa-Castelló ; Alfonso Baños</i>	
<b>VENTILATION CONTROL IN BIFURCATE TUNNELS WITH DISTRIBUTED VENTS .....</b>	<b>559</b>
<i>Zhen Tan ; H. Oliver Gao</i>	
<b>CONSTRAINT HANDLING IN ESC CONTROL STRATEGIES WITH APPLICATION TO HVAC SYSTEMS .....</b>	<b>565</b>
<i>Liujiu Dong ; Yaoyu Li ; Timothy I. Salsbury ; John M. House</i>	
<b>ON CONSENSUS-DISAGREEMENT TRADEOFF IN DISTRIBUTED OPTIMIZATION .....</b>	<b>571</b>
<i>Zhanhong Jiang ; Kushal Mukherjee ; Soumik Sarkar</i>	
<b>SOLVING LARGE-SCALE QUADRATIC PROGRAMS WITH TENSOR-TRAIN-BASED ALGORITHMS WITH APPLICATION TO TRAJECTORY OPTIMIZATION .....</b>	<b>577</b>
<i>David Miculescu ; Sertac Karaman</i>	
<b>PERMISSIVE BARRIER CERTIFICATES FOR SAFE STABILIZATION USING SUM-OF-SQUARES .....</b>	<b>585</b>
<i>Li Wang ; Dongkun Han ; Magnus Egerstedt</i>	
<b>FULLY ASYNCHRONOUS PUSH-SUM WITH GROWING INTERCOMMUNICATION INTERVALS .....</b>	<b>591</b>
<i>Alex Olshevsky ; Ioannis Ch. Paschalidis ; Artin Spiridonoff</i>	
<b>AN INTEGRAL QUADRATIC CONSTRAINT FRAMEWORK FOR REAL-TIME STEADY-STATE OPTIMIZATION OF LINEAR TIME-INVARIANT SYSTEMS .....</b>	<b>597</b>
<i>Zachary E. Nelson ; Enrique Mallada</i>	
<b>TRAFFIC CONGESTION DETECTION BASED ON HYBRID OBSERVER AND GLR TEST .....</b>	<b>604</b>
<i>Fouzi Harrou ; Abdelhafid Zeroual ; Ying Sun</i>	
<b>ROBUST TEMPORAL LOGIC INFERENCE FOR HYBRID SYSTEM OBSERVATION– AN APPLICATION ON OCCUPANCY DETECTION OF SMART BUILDINGS .....</b>	<b>610</b>
<i>Zhe Xu ; Yi Deng ; Agung Julius</i>	
<b>A HYBRID ADAPTIVE FEEDBACK LAW FOR ROBUST OBSTACLE AVOIDANCE AND COORDINATION IN MULTIPLE VEHICLE SYSTEMS .....</b>	<b>616</b>
<i>Jorge I. Poveda ; Mouhacine Benosman ; Andrew R. Teel ; Ricardo G. Sanfelice</i>	
<b>ROBUST EXPONENTIAL STABILITY OF AN INTERMITTENT TRANSMISSION STATE ESTIMATION PROTOCOL .....</b>	<b>622</b>
<i>Sean Phillips ; R. Scott Erwin ; Ricardo G. Sanfelice</i>	
<b>ROBUST HYBRID KALMAN FILTER FOR A CLASS OF NONLINEAR SYSTEMS .....</b>	<b>628</b>
<i>Bharani P. Malladi ; Ricardo G. Sanfelice ; Eric A. Butcher</i>	
<b>A HYBRID BARRIER CERTIFICATE APPROACH TO SATISFY LINEAR TEMPORAL LOGIC SPECIFICATIONS .....</b>	<b>634</b>
<i>Andrea Bisoffi ; Dimos V. Dimarogonas</i>	
<b>ATTITUDE CONTROL ON SO(3) WITH SINUSOIDAL TORQUES .....</b>	<b>640</b>
<i>Shaoqian Wang ; Roshan Chavan ; Jesse B. Hoagg ; T. Michael Seigler</i>	
<b>ENERGY-BASED OUTPUT FEEDBACK TENSION CONTROL FOR SPACE TETHER DEPLOYMENT UNDER PHYSICAL CONSTRAINT .....</b>	<b>646</b>
<i>Junjie Kang ; Zheng H. Zhu ; Aijun Li ; Changqing Wang ; Wei Wang</i>	
<b>SPLIT-HORIZON MPC FOR COUPLED STATION KEEPING, ATTITUDE CONTROL, AND MOMENTUM MANAGEMENT OF GEO SATELLITES USING ELECTRIC PROPULSION .....</b>	<b>652</b>
<i>Ryan J. Caverly ; Stefano Di Cairano ; Avishai Weiss</i>	
<b>INVARIANCE-BASED SPACECRAFT RELATIVE MOTION PLANNING INCORPORATING BOUNDED DISTURBANCES AND MINIMUM THRUST CONSTRAINTS .....</b>	<b>658</b>
<i>Gregory R. Frey ; Christopher D. Petersen ; Frederick A. Leve ; Anouck R. Girard ; Ilya V. Kolmanovsky</i>	
<b>A STUDY ON GPU-ENABLED LAMBERT'S PROBLEM SOLUTION FOR SPACE TARGETING MISSIONS .....</b>	<b>664</b>
<i>Jared Shimoun ; Ehsan Taheri ; Ilya Kolmanovsky ; Anouck Girard</i>	
<b>MODELING OF SPACECRAFT-MOUNTED ROBOT DYNAMICS AND CONTROL USING DUAL QUATERNIONS .....</b>	<b>670</b>
<i>Alfredo Valverde ; Panagiotis Tsiotras</i>	
<b>ONLINE MODEL UPDATING BY A WAKE DETECTOR FOR WIND FARM CONTROL .....</b>	<b>676</b>
<i>C.L. Bottasso ; J. Schreiber</i>	
<b>ACTIVE POWER CONTROL FOR WIND FARMS USING DISTRIBUTED MODEL PREDICTIVE CONTROL AND NEAREST NEIGHBOR COMMUNICATION .....</b>	<b>682</b>
<i>Christopher J. Bay ; Jennifer Annoni ; Timothy Taylor ; Lucy Pao ; Kathryn Johnson</i>	
<b>COORDINATED PITCH AND TORQUE CONTROL OF WIND FARMS FOR POWER TRACKING .....</b>	<b>688</b>
<i>Carl R. Shapiro ; Johan Meyers ; Charles Meneveau ; Dennice F. Gayme</i>	

<b>DATA-DRIVEN WIND FARM OPTIMIZATION INCORPORATING EFFECTS OF TURBULENCE INTENSITY</b> .....	695
<i>Christiane Adcock ; Ryan N. King</i>	
<b>PREDICTIVE CONTROL OF WIND FARMS BASED ON LEXICOGRAPHIC MINIMIZERS FOR POWER RESERVE MAXIMIZATION</b> .....	701
<i>Sara Siniscalchi-Minna ; Fernando D. Bianchi ; Carlos Ocampo-Martinez</i>	
<b>MODEL PREDICTIVE ACTIVE POWER CONTROL OF WAKED WIND FARMS</b> .....	707
<i>Mehdi Vali ; Vlaho Petrovic ; Sjoerd Boersma ; Jan-Willem Van Wingerden ; Lucy Y. Pao ; Martin Kühn</i>	
<b>HANDLING LONG HORIZONS IN MPC: A STOCHASTIC PROGRAMMING APPROACH</b> .....	715
<i>Ranjeet Kumar ; Michael J. Wenzel ; Matthew J. Ellis ; Mohammad N. Elbsat ; Kirk H. Drees ; Victor M. Zavala</i>	
<b>STOCHASTIC MPC APPROACH TO DRIFT COUNTERACTION</b> .....	721
<i>Robert A. E. Zidek ; Ilya V. Kolmanovsky ; Alberto Bemporad</i>	
<b>A NOVEL CONSTRAINT TIGHTENING APPROACH FOR NONLINEAR ROBUST MODEL PREDICTIVE CONTROL</b> .....	728
<i>Johannes Köhler ; Matthias A. Müller ; Frank Allgöwer</i>	
<b>CLOSED-LOOP ACTIVE FAULT DIAGNOSIS FOR STOCHASTIC LINEAR SYSTEMS</b> .....	735
<i>Joel A. Paulson ; Tor Aksel N. Heirung ; Richard D. Braatz ; Ali Mesbah</i>	
<b>STOCHASTIC MODEL PREDICTIVE CONTROL WITH ENLARGED DOMAIN OF ATTRACTION FOR OFFSET-FREE TRACKING</b> .....	742
<i>Tito L. M. Santos ; Joel A. Paulson ; Ali Mesbah</i>	
<b>A FIXED-POINT IMPLEMENTATION OF EXPLICIT MPC LAWS</b> .....	749
<i>Moritz Schulze Darup ; Adrian Redder ; Daniel Quevedo</i>	
<b>FORMAL CONTROL OF TRAFFIC SYSTEMS VIA NETWORK DECOMPOSITION</b> .....	756
<i>Kemal Cagri Bardakci ; Ebru Aydin Gol</i>	
<b>HUMAN-IN-THE-LOOP SYNTHESIS FOR PARTIALLY OBSERVABLE MARKOV DECISION PROCESSES</b> .....	762
<i>Steven Carr ; Nils Jansen ; Ralf Wimmer ; Jie Fu ; Ufuk Topcu</i>	
<b>INVERSE OPTIMAL CONTROL WITH REGULAR LANGUAGE SPECIFICATIONS</b> .....	770
<i>Ivan Papusha ; Min Wen ; Ufuk Topcu</i>	
<b>STEADY ABSTRACTIONS FOR CPS CONTROLLER SYNTHESIS</b> .....	778
<i>Francisco Palau Romero ; Rüdiger Ehlers</i>	
<b>DATA-DRIVEN APPROXIMATE ABSTRACTION FOR BLACK-BOX PIECEWISE AFFINE SYSTEMS</b> .....	786
<i>Gang Chen ; Zhaodan Kong</i>	
<b>SAFETY CONTROL SYNTHESIS WITH INPUT LIMITS: A HYBRID APPROACH</b> .....	792
<i>Gray C. Thomas ; Bingham He ; Luis Sentis</i>	
<b>CONIC OPTIMIZATION THEORY: CONVEXIFICATION TECHNIQUES AND NUMERICAL ALGORITHMS</b> .....	798
<i>Richard Y. Zhang ; Cédric Josz ; Somayeh Sojoudi</i>	
<b>FUEL ECONOMIC CO-OPTIMIZATION OF VEHICLE ROUTE AND SPEED FOR CONNECTED VEHICLES</b> .....	816
<i>Haiou Liu ; Chengsheng Miao ; Guoming G. Zhu ; Ziye Zhao ; Huiyan Chen</i>	
<b>COMPENSATING THE PERFORMANCE AND LOSS OF LIFE OF AN INDUCTION MACHINE BASED ELECTRIFIED POWERTRAIN USING ROBUST LPV CONTROLLER</b> .....	822
<i>Athar Hanif ; Qadeer Ahmed ; A. I. Bhatti</i>	
<b>MODEL PREDICTIVE CLIMATE CONTROL OF CONNECTED AND AUTOMATED VEHICLES FOR IMPROVED ENERGY EFFICIENCY</b> .....	828
<i>Hao Wang ; Ilya Kolmanovsky ; Mohammad Reza Amini ; Jing Sun</i>	
<b>A COMPARATIVE ASSESSMENT OF ECONOMIC MODEL PREDICTIVE CONTROL STRATEGIES FOR FUEL ECONOMY OPTIMIZATION OF HEAVY-DUTY TRUCKS</b> .....	834
<i>Ben Groelke ; John Borek ; Christian Earnhardt ; Jian Li ; Stephen Geyer ; Chris Vermillion</i>	
<b>INTELLIGENT CRUISE CONTROL OF DIESEL POWERED VEHICLES ADDRESSING THE FUEL CONSUMPTION VERSUS EMISSIONS TRADE-OFF</b> .....	840
<i>Chunan Huang ; Rasoul Salehi ; Anna G. Stefanopoulou</i>	
<b>DESIGN SPACE EXPLORATION FOR POWERTRAIN ELECTRIFICATION USING GAUSSIAN PROCESSES</b> .....	846
<i>Daniel Jung ; Qadeer Ahmed ; Giorgio Rizzoni</i>	
<b>TEAM-BASED COVERAGE CONTROL OF MOVING SENSOR NETWORKS WITH UNCERTAIN MEASUREMENTS</b> .....	852
<i>Farshid Abbasi ; Afshin Mesbahi ; Javad Mohammadpour Velni ; Changying Li</i>	



<b>DIFFERENTIAL GEOMETRIC APPROACH TO TRAJECTORY PLANNING: COOPERATIVE TRANSPORT BY A TEAM OF AUTONOMOUS MARINE VEHICLES .....</b>	<b>858</b>
<i>Hadi Hajiieghrary ; Dhanushka Kularatne ; M. Ani Hsieh</i>	
<b>DISTRIBUTED DYNAMIC AVERAGE CONSENSUS IN ASYMMETRIC NETWORKS .....</b>	<b>864</b>
<i>Mohammad Mehdi Asadi ; Stephane Blouin ; Amir G. Aghdam</i>	
<b>IMPLEMENTATION OF HIERARCHICAL FRAMEWORK WITH ACCURATE LOCALIZATION AND LOW LEVEL CONTROL IN A LOW-COST SCALED AUTONOMOUS CAR .....</b>	<b>870</b>
<i>A. Goswami ; H. Saeidi ; A. Vahidi ; P. Jayakumar</i>	
<b>MODEL-FREE EVENT-TRIGGERED CONTAINMENT CONTROL OF MULTI-AGENT SYSTEMS .....</b>	<b>877</b>
<i>Yongliang Yang ; Hamidreza Modares ; Kyriakos G. Vamvoudakis ; Yixin Yin ; Donald C. Wunsch</i>	
<b>MEAN-FIELD STABILIZATION OF ROBOTIC SWARMS TO PROBABILITY DISTRIBUTIONS WITH DISCONNECTED SUPPORTS .....</b>	<b>885</b>
<i>Karthik Elamvazhuthi ; Shiba Biswal ; Spring Berman</i>	
<b>RETROSPECTIVE COST ADAPTIVE CONTROL USING COMPOSITE FIR/IIR CONTROLLERS.....</b>	<b>893</b>
<i>Yousaf Rahman ; Khaled F. Aljanaideh ; Dennis S. Bernstein</i>	
<b>AN ADAPTIVE CONTROL SCHEME FOR THREE-PHASE GRID-CONNECTED INVERTERS IN PHOTOVOLTAIC POWER GENERATION SYSTEMS .....</b>	<b>899</b>
<i>Wanshi Hong ; Gang Tao</i>	
<b>ADAPTIVE SLIDING MODE CONTROL WITHOUT KNOWLEDGE OF UNCERTAINTY BOUNDS .....</b>	<b>905</b>
<i>Yi-Wen Liao ; Selina Pan ; Francesco Borrelli ; J. Karl Hedrick</i>	
<b>UTILIZING THE ADAPTIVE CONTROL IN MITIGATING THE SEISMIC RESPONSE OF ADJACENT BUILDINGS CONNECTED WITH MR DAMPERS.....</b>	<b>912</b>
<i>Omar A.S. Al-Fahdawi ; Luciana R. Barroso ; Rachel W. Soares</i>	
<b>PARAMETER ESTIMATION AND LINE WIDTH CONTROL OF ROBOT GUIDED INKJET DEPOSITION .....</b>	<b>918</b>
<i>Bashir Hosseini Jafari ; Namhyung Lee ; Bogdan Antohe ; Nicholas Gans</i>	
<b>PARAMETER ESTIMATION WITH QUANTUM INSPIRED TECHNIQUES AND ADAPTIVE MULTIPLE-MODEL FILTERS.....</b>	<b>925</b>
<i>Qizi Zhang ; S.N. Balakrishnan ; Jerome Busemeyer</i>	
<b>CLOSED-LOOP GUIDANCE OF MOBILE SENSORS FOR THE ESTIMATION OF SPATIALLY DISTRIBUTED PROCESSES.....</b>	<b>931</b>
<i>Michael A. Demetriou</i>	
<b>PDE-BASED SWARM CONTROL FOR CONTAMINANT TRACKING APPLICATIONS .....</b>	<b>937</b>
<i>Meysam Ghanavati ; Animesh Chakravarthy ; Prathyush P. Menon</i>	
<b>TRAFFIC CONGESTION CONTROL ON AW-RASCLE-ZHANG MODEL: FULL-STATE FEEDBACK.....</b>	<b>943</b>
<i>Huan Yu ; Miroslav Krstic</i>	
<b>A DECOMPOSITION APPROACH FOR A CLASS OF SPATIALLY INTERCONNECTED SYSTEMS OF FINITE SPATIAL EXTENT .....</b>	<b>949</b>
<i>Sabin-Mihai Gînta ; Ann-Kathrin Schug ; Herbert Werner</i>	
<b>SPARSE CONTROL TO PREVENT BLACK SWAN CLUSTERING IN COLLECTIVE DYNAMICS .....</b>	<b>955</b>
<i>Benedetto Piccoli ; Nastassia Pouradier Duteil ; Emmanuel Trélat</i>	
<b>OPTIMAL H<sub>2</sub> DECENTRALIZED CONTROL OF CONE CAUSAL SPATIALLY INVARIANT SYSTEMS .....</b>	<b>961</b>
<i>M. Ehsan Raoufat ; Seddik M. Djouadi</i>	
<b>MULTIPLE HYPOTHESIS TESTING IN ADVERSARIAL ENVIRONMENTS: A GAME-THEORETIC APPROACH.....</b>	<b>967</b>
<i>Xiaoqiang Ren ; Yilin Mo</i>	
<b>A COMPARISON OF STEALTHY SENSOR ATTACKS ON CONTROL SYSTEMS.....</b>	<b>973</b>
<i>Navid Hashemi ; Carlos Murguia ; Justin Ruths</i>	
<b>AN ADAPTIVE CONTROL ARCHITECTURE FOR LEADER-FOLLOWER MULTIAGENT SYSTEMS WITH STOCHASTIC DISTURBANCES AND SENSOR AND ACTUATOR ATTACKS .....</b>	<b>980</b>
<i>Xu Jin ; Wassim M. Haddad</i>	
<b>CONSTRAINING ATTACKER CAPABILITIES THROUGH ACTUATOR SATURATION.....</b>	<b>986</b>
<i>Sahand Hadizadeh Kafash ; Jairo Giraldo ; Carlos Murguia ; Alvaro A. Cardenas ; Justin Ruths</i>	

<b>CYBER SECURITY AND VULNERABILITY ANALYSIS OF NETWORKED CONTROL SYSTEM SUBJECT TO FALSE-DATA INJECTION</b> .....	992
<i>Benjamin Gerard ; Souad Bezzaoucha Rebai ; Holger Voos ; Mohamed Darouach</i>	
<b>PRIVACY OF INFORMATION SHARING SCHEMES IN A CLOUD-BASED MULTI-SENSOR ESTIMATION PROBLEM</b> .....	998
<i>Ehsan Nekouei ; Mikael Skoglund ; Karl H. Johansson</i>	
<b>INTERACTIVE PLANNING AND SENSING IN UNCERTAIN ENVIRONMENTS WITH TASK-DRIVEN SENSOR PLACEMENT</b> .....	1003
<i>Benjamin Cooper ; Raghvendra V. Cowlagi</i>	
<b>AN EVENT-TRIGGERED VIRTUAL FORCE ALGORITHM FOR MULTI-AGENT COVERAGE CONTROL WITH OBSTACLES</b> .....	1009
<i>Mohanad Ajina ; Cameron Nowzari</i>	
<b>ATTACK RESILIENT DISTRIBUTED ESTIMATION: A CONSENSUS+INNOVATIONS APPROACH</b> .....	1015
<i>Yuan Chen ; Soumya Kar ; José M.F. Moura</i>	
<b>STOCHASTIC STABILITY OF DISTRIBUTED EXTENDED KALMAN FILTER WITH CONSENSUS ON ESTIMATES</b> .....	1021
<i>Lepeng Chen ; Rongxin Cui ; Weisheng Yan</i>	
<b>A RANDOMIZED GREEDY ALGORITHM FOR NEAR-OPTIMAL SENSOR SCHEDULING IN LARGE-SCALE SENSOR NETWORKS</b> .....	1027
<i>Abolfazl Hashemi ; Mahsa Ghasemi ; Haris Vikalo ; Ufuk Topcu</i>	
<b>DISTRIBUTED COESTIMATION IN HETEROGENEOUS SENSOR NETWORKS WITH TIME-VARYING ACTIVE AND PASSIVE NODE ROLES</b> .....	1033
<i>Dzung Tran ; Tansel Yucelen ; Sarangapani Jagannathan ; David Casbeer</i>	
<b>REINFORCEMENT LEARNING-BASED ADAPTIVE OPTIMAL CONTROL FOR PARTIALLY UNKNOWN SYSTEMS USING DIFFERENTIATOR</b> .....	1039
<i>Xinxin Guo ; Weisheng Yan ; Rongxin Cui</i>	
<b>SPARSE FEATURE GROUPING BASED ON <math>l_{1/2}</math> NORM REGULARIZATION</b> .....	1045
<i>Wentao Mao ; Wentao Xu ; Yuan Li</i>	
<b>BUILDING ENERGY DISAGGREGATION USING SPATIOTEMPORAL PATTERN NETWORK</b> .....	1052
<i>Chao Liu ; Zhanhong Jiang ; Adedotun Akintayo ; Gregor P. Henze ; Soumik Sarkar</i>	
<b>SENSOR SELECTION VIA OBSERVABILITY ANALYSIS IN FEATURE SPACE</b> .....	1058
<i>Harshal Maske ; Hassan A. Kingravi ; Girish Chowdhary</i>	
<b>A BOOSTING-BASED DEEP NEURAL NETWORKS ALGORITHM FOR REINFORCEMENT LEARNING</b> .....	1065
<i>Yu Wang ; Hongxia Jin</i>	
<b>SIMULTANEOUS OPTIMIZATION OF STATISTICAL MODEL AND CONTROL INPUT PLAN</b> .....	1072
<i>Yoshinobu Iimura ; Masashi Wakaiki ; Katsumi Homma ; Yuhei Umeda ; Junji Kaneko ; Hiroyuki Higuchi ; Kazumi Kubota ; Naoya Asami ; Kazuto Ikeda</i>	
<b>STATOR RESISTANCE ESTIMATION USING ADAPTIVE ESTIMATION VIA A BANK OF KALMAN FILTERS</b> .....	1078
<i>Alia R. Strandt ; Andrew P. Strandt ; Susan C. Schneider ; Edwin E. Yaz</i>	
<b>DISTRIBUTED REDUCED ORDER SOURCE IDENTIFICATION</b> .....	1084
<i>Reza Khodayi-Mehr ; Wilkins Aquino ; Michael M. Zavlanos</i>	
<b>IMPROVED INCORPORATION OF PRIOR KNOWLEDGE FOR REGULARIZED FIR MODEL IDENTIFICATION</b> .....	1090
<i>Tobias Münker ; Julian Belz ; Oliver Nelles</i>	
<b>TOPOLOGY LEARNING OF RADIAL DYNAMICAL SYSTEMS WITH LATENT NODES</b> .....	1096
<i>Saurav Talukdar ; Deepjyoti Deka ; Michael Chertkov ; Murti Salapaka</i>	
<b>COVARIANCE BASED REALIZATION ALGORITHM FOR IDENTIFICATION OF LINEAR TIME PERIODIC SYSTEMS</b> .....	1102
<i>Yangsheng Hu ; Raymond A. De Callafon</i>	
<b>IDENTIFICATION AND CONTROL OF MIMO LINEAR SYSTEMS UNDER SUFFICIENT AND INSUFFICIENT EXCITATION</b> .....	1108
<i>Saeed Ansari-Rad ; Sina Jahandari ; Ahmad Kalhor ; Babak Nadjari Araabi</i>	
<b>PERFORMANCE SPECIFIED STATE ESTIMATION WITH MINIMUM RISK</b> .....	1114
<i>Elahe Aghapour ; Jay A. Farrell</i>	
<b>SIMULTANEOUS PARAMETERS IDENTIFICATION AND STATE ESTIMATION BASED ON UNKNOWN INPUT OBSERVER FOR A CLASS OF LPV SYSTEMS</b> .....	1120
<i>M. Fouka ; L. Nehaoua ; H. Arioui ; S. Mammari</i>	

<b>THE MULTI-INNOVATION STOCHASTIC GRADIENT METHOD FOR MULTI-FREQUENCY SIGNAL MODELS.....</b>	1126
<i>Ling Xu ; Feng Ding ; Yanjiao Wang ; Li Xie ; Junhong Li</i>	
<b>HIGH-FIDELITY DISCRETE-TIME STATE-DEPENDENT RICCATI EQUATION FILTERS FOR STOCHASTIC NONLINEAR SYSTEMS WITH GAUSSIAN/NON-GAUSSIAN NOISES.....</b>	1132
<i>Insu Chang ; Joseph Bentsman</i>	
<b>VEHICLE LATERAL DYNAMICS ESTIMATION USING SWITCHED UNKNOWN INPUTS INTERVAL OBSERVERS: EXPERIMENTAL VALIDATION.....</b>	1138
<i>Sara Ifqir ; Naima Ait Oufroukh ; Dalil Ichalal ; Saïd Mammam</i>	
<b>IDENTIFICATION OF SPATIALLY VARYING GEOLOGICAL PROPERTIES IN A HETEROGENEOUS RESERVOIR USING ENKF AND POD BASED PARAMETERIZATION.....</b>	1144
<i>Abhinav Narasingam ; Prashanth Siddhamshetty ; Joseph Sang-Il Kwon</i>	
<b>A CLASS OF SDRE-RRT BASED KINODYNAMIC MOTION PLANNERS.....</b>	1150
<i>Adnan Tahirovic ; Faris Janjoš</i>	
<b>A CONVEX OPTIMIZATION FRAMEWORK FOR CONSTRAINED CONCURRENT MOTION CONTROL OF A HYBRID REDUNDANT SURGICAL SYSTEM.....</b>	1158
<i>Farshid Alambeigi ; Shahriar Sefati ; Mehran Armand</i>	
<b>PIPELINE LEAK DETECTION SWIMMING ROBOT DESIGN AND DEPLOYMENT.....</b>	1166
<i>Jianmin Zheng ; Sijia Wang ; Azzam Hazim ; Stevan Dubljevic</i>	
<b>HYBRID CONTROL OF MANIPULATORS IN HUMAN-ROBOT COEXISTENCE SCENARIOS.....</b>	1172
<i>Andrea Casalino ; Paolo Rocco ; Maria Prandini</i>	
<b>SOLVING COMPLEX TASKS HIERARCHICALLY FROM DEMONSTRATIONS.....</b>	1178
<i>Wei Zheng ; Bo Wu ; Hai Lin</i>	
<b>EVENT-TRIGGERED CONTROLLER SYNTHESIS FOR DYNAMICAL SYSTEMS WITH TEMPORAL LOGIC CONSTRAINTS.....</b>	1184
<i>Dipankar Maity ; John S. Baras</i>	
<b>DYNAMICAL SPIKING NETWORKS FOR DISTRIBUTED CONTROL OF NONLINEAR SYSTEMS.....</b>	1190
<i>Fuqiang Huang ; Shinung Ching</i>	
<b>GLOBAL STABILITY ANALYSIS OF STRICTLY POSITIVE STEADY STATE FOR A SURVIVING HEMATOPOIETIC STEM CELLS MODELS.....</b>	1196
<i>Abdelhafid Zenati ; Messaoud Chakir ; Mohamed Tadjine ; Larbi Chrifi-Alaoui</i>	
<b>NON-DETERMINISTIC PREDATOR-PREY MODEL WITH ACCELERATING PREY.....</b>	1202
<i>Brian A. Free ; Matthew J. Mchenry ; Derek A. Paley</i>	
<b>INTRODUCING CELL-PLASTICITY MECHANISMS INTO A CLASS OF CELL POPULATION DYNAMICAL SYSTEMS.....</b>	1208
<i>Walid Djema ; Catherine Bonnet ; Frédéric Mazenc ; Jean Clairambault</i>	
<b>DISCRETE SPATIAL FILTERING BY NETWORKS OF CELLS FACILITATES BIOLOGICAL PATTERN FORMATION.....</b>	1214
<i>Melinda L. Perkins ; Murat Arcak</i>	
<b>STABILITY ANALYSIS OF A NONLINEAR SYSTEM WITH INFINITE DISTRIBUTED DELAYS DESCRIBING CELL DYNAMICS.....</b>	1220
<i>W. Djema ; F. Mazenc ; C. Bonnet ; J. Clairambault ; E. Fridman</i>	
<b>A PARAMETRIC LTI INTERPOLATION FOR MINIMUM PHASE SYSTEMS WITH GUARANTEED STABILITY AND BOUNDS.....</b>	1224
<i>István Gozse ; Alexandros Soumelidis</i>	
<b>CAUSALITY IN DUAL FACETED LINEARIZATION OF NONLINEAR DYNAMICAL SYSTEMS.....</b>	1230
<i>Filippos E. Sotiropoulos ; H. Harry Asada</i>	
<b>PHASE- VARIABLE CANONICAL STATE-SPACE REALIZATIONS AND INITIALIZATIONS FOR LINEAR TIME-INVARIANT MULTI-TERM FRACTIONAL DIFFERENTIAL EQUATIONS.....</b>	1238
<i>Arman Dabiri ; Eric A. Butcher ; Morad Nazari</i>	
<b>A SOLUTION TO THE MINIMUM <math>l_1</math>-NORM CONTROLLABILITY PROBLEM FOR DISCRETE-TIME LINEAR SYSTEMS VIA ITERATIVELY REWEIGHTED LEAST SQUARES.....</b>	1244
<i>Efstathios Bakolas</i>	
<b>UPPER-BOUND ANALYSIS OF PERFORMANCE DEGRADATION IN ENCRYPTED CONTROL SYSTEM.....</b>	1250
<i>Kiminao Kogiso</i>	
<b>FRACTIONAL ORDER ZERO PHASE ERROR TRACKING CONTROL FOR CONTINUOUS TIME NON-MINIMUM PHASE PROCESSES.....</b>	1256
<i>Jie Yuan ; Yangquan Chen ; Shumin Fei</i>	

<b>A CONSERVATION-BASED DISTRIBUTED CONTROL ARCHITECTURE FOR NETWORK CONSENSUS WITH STOCHASTIC COMMUNICATION UNCERTAINTY .....</b>	<b>1262</b>
<i>Wassim M. Haddad ; Xu Jin ; Tanmay Rajpurohit</i>	
<b>ON CONTROL OF HETEROGENEOUS MULTIAGENT SYSTEMS: A DYNAMIC MEASUREMENT OUTPUT FEEDBACK APPROACH.....</b>	<b>1268</b>
<i>S. Burak Sarsilmaz ; Tansel Yucelen</i>	
<b>DISTRIBUTED ROBUST SET-INVARIANCE FOR INTERCONNECTED LINEAR SYSTEMS .....</b>	<b>1274</b>
<i>Sadra Sadraddini ; Calin Belta</i>	
<b>OPTIMIZATION OF THE <math>H_{\infty}</math>-NORM OF DYNAMIC FLOW NETWORKS.....</b>	<b>1280</b>
<i>Alexander Johansson ; Jieqiang Wei ; Henrik Sandberg ; Karl H. Johansson ; Jie Chen</i>	
<b>RESILIENT INFORMATION-EXCHANGE PROTOCOL FOR DISTRIBUTED MODEL PREDICTIVE CONTROL SCHEMES.....</b>	<b>1286</b>
<i>Wicak Ananduta ; Julian Barreiro-Gomez ; Carlos Ocampo-Martinez ; Nicanor Quijano</i>	
<b>RESILIENT LEADER-FOLLOWER CONSENSUS TO ARBITRARY REFERENCE VALUES.....</b>	<b>1292</b>
<i>James Usevitch ; Dimitra Panagou</i>	
<b>GRACEFUL GAIT TRANSITIONS FOR HOPPING ROBOTS ON DEFORMABLE TERRAIN.....</b>	<b>1299</b>
<i>Vishal Murali ; Nak-Seung P. Hyun ; Erik I. Verriest</i>	
<b>MODELING AND CONTROL OF A BIFILAR CRANE PAYLOAD.....</b>	<b>1305</b>
<i>Andrej Cibicik ; Torstein A. Myhre ; Olav Egeland</i>	
<b>DYNAMIC MODEL AND LINE OF SIGHT CONTROL OF A 3-DOF INERTIAL STABILIZATION PLATFORM VIA FEEDBACK LINEARIZATION .....</b>	<b>1313</b>
<i>Matheus F. Reis ; Guilherme P. S. Carvalho ; Alex F. Neves ; Alessandro J. Peixoto</i>	
<b>CLUSTERED OPTIMIZATION OF A SMALL-SCALE ROBOT SWARM WITH MINIMAL ON-BOARD SENSING .....</b>	<b>1319</b>
<i>Jinhong Qu ; Xinlu Li Hermione ; Kenn R. Oldham</i>	
<b>DESIGN AND ANALYSIS OF SIMPLE MOTION TRAJECTORIES FOR RESIDUAL VIBRATION SUPPRESSION OF INDUSTRIAL MACHINES .....</b>	<b>1325</b>
<i>Jan El Hussein ; Naoki Uchiyama</i>	
<b>BALANCE PERFORMANCE TUNING OF RIDER-BIKEBOT INTERACTIONS .....</b>	<b>1333</b>
<i>Pengcheng Wang ; Jingang Yi</i>	
<b>INTEGRAL INPUT-TO-STATE STABILITY OF CASCADED SYSTEMS AND OBSERVER-BASED FEEDBACK DESIGN.....</b>	<b>1339</b>
<i>Hiroshi Ito</i>	
<b>MULTI-OBJECTIVE NONLINEAR OBSERVER DESIGN USING BMIS.....</b>	<b>1346</b>
<i>Yan Wang ; Rajesh Rajamani ; Ali Zemouche</i>	
<b>A DECOUPLING APPROACH TO DESIGN OBSERVERS FOR POLYTOPIC TAKAGI-SUGENO MODELS SUBJECT TO UNKNOWN INPUTS .....</b>	<b>1352</b>
<i>Souad Bezzaoucha Rebaï ; Holger Voos ; Jorge A. Dávila ; Francisco Javier Bejarano</i>	
<b>REGULATION OF NON-MINIMUM-PHASE NONLINEAR SYSTEMS USING SLOW INTEGRATORS.....</b>	<b>1358</b>
<i>Xiucui Huang ; Hassan K. Khalil ; Yongduan Song</i>	
<b>OBSERVER-BASED OUTPUT FEEDBACK CONTROL DESIGN FOR SYSTEMS WITH INCREMENTALLY CONIC NONLINEARITIES.....</b>	<b>1364</b>
<i>Xiangru Xu ; Behçet Açikmese ; Martin Corless ; Hossein Sartipizadeh</i>	
<b>NONLINEAR ADAPTIVE GAS FORCE OBSERVER FOR DETERMINING ABSOLUTE POSITION IN A LINEAR VAPOR COMPRESSOR .....</b>	<b>1370</b>
<i>Joseph Latham ; M. L. Mcintyre</i>	
<b>A ROBUST ACCELERATED OPTIMIZATION ALGORITHM FOR STRONGLY CONVEX FUNCTIONS.....</b>	<b>1376</b>
<i>Saman Cyrus ; Bin Hu ; Bryan Van Scoy ; Laurent Lessard</i>	
<b>A RANDOM ALGORITHM FOR SEMIDEFINITE PROGRAMMING PROBLEMS.....</b>	<b>1382</b>
<i>Jianjun Yuan ; Andrew Lamperski</i>	
<b>DUALITY APPROACH TO BILEVEL PROGRAMS WITH A CONVEX LOWER LEVEL .....</b>	<b>1388</b>
<i>Aurélien Ouattara ; Anil Aswani</i>	
<b>PROBABILITY MAXIMIZATION WITH RANDOM LINEAR INEQUALITIES: ALTERNATIVE FORMULATIONS AND STOCHASTIC APPROXIMATION SCHEMES.....</b>	<b>1396</b>
<i>I. E. Bardakci ; C. Lagoa ; U. V. Shanbhag</i>	
<b>PRIVATE OPTIMIZATION ON NETWORKS .....</b>	<b>1402</b>
<i>Shripad Gade ; Nitin H. Vaidya</i>	
<b>LEARNING IN NON-STATIONARY WIRELESS CONTROL SYSTEMS VIA NEWTON'S METHOD.....</b>	<b>1410</b>
<i>Mark Eisen ; Konstantinos Gatsis ; George J. Pappas ; Alejandro Ribeiro</i>	

<b>MODEL PREDICTIVE CONTROL UNDER INTERMITTENT MEASUREMENTS DUE TO COMPUTATIONAL CONSTRAINTS: FEASIBILITY, STABILITY, AND ROBUSTNESS.....</b>	1418
<i>Berk Altin ; Ricardo G. Sanfelice</i>	
<b>A DATA-DRIVEN APPROACH TO STOCHASTIC CONSTRAINED CONTROL OF PIECEWISE AFFINE SYSTEMS.....</b>	1424
<i>Riccardo Maria Vignali ; Daniele Ioli ; Maria Prandini</i>	
<b>AN ONLINE ALGORITHM FOR OPTIMIZING INVARIANT CONDITIONS FOR PROCEDURAL NONLINEAR CONSTRAINED HYBRID SYSTEMS.....</b>	1430
<i>Anil Yildiz ; N. Kemal Ure ; Gokhan Inalhan</i>	
<b>OBSERVER-BASED FEEDBACK CONTROLLERS FOR EXPONENTIAL STABILIZATION OF HYBRID PERIODIC ORBITS: APPLICATION TO UNDERACTUATED BIPEDAL WALKING .....</b>	1438
<i>Kaveh Akbari Hamed ; Aaron D. Ames ; Robert D. Gregg</i>	
<b>HYBRID DYNAMICAL SYSTEM MODEL AND ROBUST CONTROL OF A HYBRID NEUROPROSTHESIS UNDER FATIGUE BASED SWITCHING .....</b>	1446
<i>Zhiyu Sheng ; Vahidreza Molazadeh ; Nitin Sharma</i>	
<b>HYBRID CONTROL OF VIBRATORY NETWORKS WITH SEMIRESONANT LATCHES .....</b>	1452
<i>Jeffrey T Scruggs ; Brenden S Ritola</i>	
<b>COORDINATED MODEL PREDICTIVE CONTROL OF AIRCRAFT GAS TURBINE ENGINE WITH SIMPLIFIED ELECTRICAL SYSTEM MODEL.....</b>	1460
<i>Jinwoo Seok ; David M. Reed ; Ilya V. Kolmanovsky ; Anouck R. Girard</i>	
<b>PREDICTION OF PROJECTILE IMPACT POINT USING APPROXIMATE STATISTICAL MOMENTS.....</b>	1467
<i>Cenk Demir ; Mohammad Soltani ; Abhyudai Singh</i>	
<b>SINS/CNS INTEGRATED NAVIGATION SYSTEM FOR BALLISTIC MISSILE BASED ON MAXIMUM CORRENTROPY KALMAN FILTER.....</b>	1473
<i>Bowen Hou ; Zhangming He ; Haiyin Zhou ; Xuanying Zhou ; Bowen Sun ; Shuqing Xu ; Jiongqi Wang</i>	
<b>STOCHASTIC MODEL PREDICTIVE CONTROL FOR GUST ALLEVIATION DURING AIRCRAFT CARRIER LANDING.....</b>	1479
<i>Gaurav Misra ; Xiaoli Bai</i>	
<b>ADAPTIVE TYPE-2 FUZZY CONTROL FOR FLEXIBLE AIR-BREATHING HYPERSONIC VEHICLES WITH MEASUREMENT NOISES .....</b>	1485
<i>Yifan Liu ; Jianqiang Yi ; Ruyi Yuan ; Zhiqiang Pu</i>	
<b>INDIVIDUAL PITCH CONTROL OF A CLIPPER WIND TURBINE FOR BLADE IN-PLANE LOAD REDUCTION .....</b>	1491
<i>Shu Wang ; Peter Seiler ; Zongxuan Sun</i>	
<b>PLATFORM STABILIZATION AND LOAD REDUCTION OF FLOATING OFFSHORE WIND TURBINES USING DYNAMIC VIBRATION ABSORBERS.....</b>	1497
<i>Zhongyou Wu ; Yaoyu Li</i>	
<b>TIME-VARYING ROBUSTNESS MARGINS FOR WIND TURBINES .....</b>	1503
<i>Sanjana Vijayshankar ; Peter Seiler</i>	
<b>A COMPARISON OF INDIVIDUAL AND COLLECTIVE PITCH MODEL PREDICTIVE CONTROLLERS FOR WIND TURBINES .....</b>	1509
<i>Michael N. Sinner ; Lucy Y. Pao</i>	
<b>CONTROL DESIGN FOR DISTURBANCE REJECTION IN WIND TURBINES.....</b>	1515
<i>Mohammad Salaria Khaniki ; David Schlipf ; Vasilis Pettas ; Po Wen Cheng</i>	
<b>APPROXIMATING EXPLICIT MODEL PREDICTIVE CONTROL USING CONSTRAINED NEURAL NETWORKS.....</b>	1520
<i>Steven Chen ; Kelsey Saulnier ; Nikolay Atanasov ; Daniel D. Lee ; Vijay Kumar ; George J. Pappas ; Manfred Morari</i>	
<b>PREDICTION-BASED ADAPTIVE ROBUST COMPENSATION FOR MOTION CONTROL OF TIME-DELAYED UNCERTAIN LINEAR MOTORS.....</b>	1528
<i>Jayaprakash Suraj Nandiganahalli ; Cheolhyeon Kwon ; Inseok Hwang</i>	
<b>AN ANALYTICAL TUNING APPROACH FOR ADAPTIVE MPC PARAMETERS APPLIED TO LTV SISO SYSTEMS .....</b>	1534
<i>Marwa Turki ; Nicolas Langlois ; Adnan Yassine</i>	
<b>SUCCESSIVE LINEARIZATION IN MODEL-BASED CONTROL FOR THERMAL MANAGEMENT SYSTEMS.....</b>	1540
<i>Mahmoud El Chamie ; Fu Lin</i>	
<b>DYNAMIC RESOURCE ALLOCATION TO CONTROL EPIDEMIC OUTBREAKS A MODEL PREDICTIVE CONTROL APPROACH.....</b>	1546
<i>Johannes Köhler ; Chinwendu Enyioha ; Frank Allgöwer</i>	

<b>OPTIMAL PREDICTIVE ECO-DRIVING CYCLES FOR CONVENTIONAL AND ELECTRIC CARS</b> .....	1552
<i>D. Maamria ; K. Gillet ; G. Colin ; Y. Chamaillard ; C. Nouillant</i>	
<b>MULTIPLE PURSUER-BASED INTERCEPT VIA FORWARD STOCHASTIC REACHABILITY</b> .....	1559
<i>Abraham P. Vinod ; Baisravan Homchaudhuri ; Christoph Hintz ; Anup Parikh ; Stephen P. Buerger ; Meeko M. K. Oishi ; Greg Brunson ; Shakeeb Ahmad ; Rafael Fierro</i>	
<b>DECENTRALIZED ROBUST CONTROL OF COUPLED MULTI-AGENT SYSTEMS UNDER LOCAL SIGNAL TEMPORAL LOGIC TASKS</b> .....	1567
<i>Lars Lindemann ; Dimos V. Dimarogonas</i>	
<b>REACHABLE SET ESTIMATION AND SAFETY VERIFICATION FOR PIECEWISE LINEAR SYSTEMS WITH NEURAL NETWORK CONTROLLERS</b> .....	1574
<i>Weiming Xiang ; Hoang-Dung Tran ; Joel A. Rosenfeld ; Taylor T. Johnson</i>	
<b>COORDINATED CONTROL OF WIND TURBINE GENERATOR AND ENERGY STORAGE SYSTEM FOR FREQUENCY REGULATION UNDER TEMPORAL LOGIC SPECIFICATIONS</b> .....	1580
<i>Zhe Xu ; Agung Julius ; Joe H. Chow</i>	
<b>COMPOSITIONAL ABSTRACTIONS OF NETWORKS OF STOCHASTIC HYBRID SYSTEMS UNDER RANDOMLY SWITCHED TOPOLOGIES</b> .....	1586
<i>Asad Ullah Awan ; Majid Zamani</i>	
<b>GENERALIZED ROBUST MTL SEMANTICS FOR PROBLEMS IN CARDIAC ELECTROPHYSIOLOGY</b> .....	1592
<i>Houssam Abbas ; Rahul Mangharam</i>	
<b>STOCHASTIC FEEDBACK COMBUSTION CONTROL AT HIGH DILUTION LIMIT</b> .....	1598
<i>Bryan P. Maldonado ; James S. Freudenberg ; Anna G. Stefanopoulou</i>	
<b>MODEL PREDICTIVE CONTROL OF AN RCCI ENGINE</b> .....	1604
<i>Akshat Raut ; Mehran Bidarvatan ; Hoseinali Borhan ; Mahdi Shahbakhti</i>	
<b>OPTIMAL COMBUSTION PHASING CONTROL OF A TURBULENT JET IGNITION ENGINE</b> .....	1610
<i>Ruitao Song ; Ravi Teja Vedula ; Guoming Zhu ; Harold Schock</i>	
<b>CONTROL-ORIENTED MODELING OF COMBUSTION PHASING ON DIESEL ENGINES</b> .....	1616
<i>Wenbo Sui ; Carrie M. Hall</i>	
<b>REAL-TIME CONTROL OF HCCI ENGINE USING MODEL PREDICTIVE CONTROL</b> .....	1622
<i>Khashayar Ebrahimi ; C R Bob Koch</i>	
<b>PREDICTIVE SECOND ORDER SLIDING CONTROL OF CONSTRAINED LINEAR SYSTEMS WITH APPLICATION TO AUTOMOTIVE CONTROL SYSTEMS</b> .....	1629
<i>Mohammad Reza Amini ; Mahdi Shahbakhti ; Jing Sun</i>	
<b>CONSENSUS ON SO(3) WITH PIECEWISE-CONTINUOUS SINUSOIDS</b> .....	1635
<i>Roshan Chavan ; Shaoqian Wang ; T. Michael Seigler ; Jesse B. Hoagg</i>	
<b>SYNCHRONOUS RENDEZVOUS FOR PERIODICALLY ORBITING VEHICLES WITH VERY-LOW-RANGE INTERACTIONS</b> .....	1641
<i>Cong Wei ; Caili Li ; Herbert G. Tanner</i>	
<b>AN OBSERVER-FREE OUTPUT FEEDBACK COOPERATIVE CONTROL ARCHITECTURE FOR LINEAR MULTIAGENT SYSTEMS WITH EVENT-TRIGGERING</b> .....	1647
<i>Ali Albattat ; Tansel Yucelen ; Sarangapani Jagannathan</i>	
<b>CONSENSUS OF SINGLE INTEGRATOR MULTI-AGENT SYSTEMS WITH DISTRIBUTED INFINITE TRANSMISSION DELAYS</b> .....	1653
<i>Xiang Xu ; Lu Liu ; Gang Feng</i>	
<b>FAST PARALLEL COMPUTATION USING PERIODIC SYNCHRONIZATION</b> .....	1659
<i>Soumyadip Ghosh ; Jiakai Lu ; Vijay Gupta ; Gretar Tryggvason</i>	
<b>A NOVEL DISTRIBUTED ALGORITHM FOR CONSENSUS UNDER DIGRAPH TOPOLOGY WITH UNCERTAIN TARGET INFORMATION</b> .....	1665
<i>Arijit Sen ; Soumya Ranjan Sahoo ; Mangal Kothari</i>	
<b>SUPPRESSING CHAOTIC AND HYPERCHAOTIC DYNAMICS OF SMART VALVES NETWORK USING A CENTRALIZED ADAPTIVE APPROACH</b> .....	1671
<i>Peiman Naseradinmousavi ; Hashem Ashrafiuon ; Mostafa Bagheri</i>	
<b>INDIRECT ADAPTIVE FUZZY CONTROLLER DESIGN FOR A ROTATIONAL INVERTED PENDULUM</b> .....	1677
<i>R. Eini ; S. Abdelwahed</i>	
<b>LINEAR INVERSE REINFORCEMENT LEARNING IN CONTINUOUS TIME AND SPACE</b> .....	1683
<i>Rushikesh Kamalapurkar</i>	
<b>DESIGN OF FRACTIONAL-ORDER MULTIVARIABLE EXTREMUM SEEKING WITH NEWTON ALGORITHM</b> .....	1689
<i>Chun Yin ; Binyang Hu ; Sara Dadras ; Hadi Malek ; Jianhong Xue ; Xuegang Huang</i>	

<b>OUTPUT-FEEDBACK ADAPTIVE CONTROL OF DISCRETE-TIME SYSTEMS WITH UNMODELED, UNMATCHED, INACCESSIBLE NONLINEARITIES .....</b>	<b>1695</b>
<i>Syed Aseem Ul Islam ; Dennis S. Bernstein</i>	
<b>MODIFIED STATE OBSERVER BASED DECENTRALIZED NEUROADAPTIVE CONTROLLER FOR LARGE SCALE INTERCONNECTED UNCERTAIN SYSTEMS .....</b>	<b>1701</b>
<i>A. Ghafoor ; S.N. Balakrishnan ; T. Yucelen</i>	
<b>MINIMUM TIME DISTURBANCE REJECTION AND TRACKING CONTROL OFN+MLINEAR HYPERBOLIC PDES .....</b>	<b>1707</b>
<i>Henrik Anfinssen ; Ole Morten Aamo</i>	
<b>FEEDBACK CONTROL ON THE VELOCITY FIELD AND SOURCE TERM OF A NORMAL FLOW EQUATION .....</b>	<b>1714</b>
<i>Angelo Alessandri ; Patrizia Bagnnerini ; Mauro Gaggero ; Anna Rossi</i>	
<b>AN OPTIMIZATION-BASED APPROACH FOR DYNAMIC ACTUATOR SCHEDULING IN DISTRIBUTED PROCESSES CONTROLLED OVER NETWORKS .....</b>	<b>1720</b>
<i>Da Xue ; Nael H. El-Farra</i>	
<b>COMPUTATION OF NONLINEAR FEEDBACK FOR FLOW CONTROL PROBLEMS .....</b>	<b>1726</b>
<i>Jeff Borggaard ; Lizette Zietsman</i>	
<b>ROBUST OUTPUT REGULATION OF2x2HYPERBOLIC SYSTEMS: CONTROL LAW AND INPUT-TO-STATE STABILITY .....</b>	<b>1732</b>
<i>Pierre-Olivier Lamare ; Jean Auriol ; Florent Di Meglio ; Ulf Jakob F. Aarsnes</i>	
<b>INPUT-TO-STATE STABILITY FOR THE CONTROL OF STEFAN PROBLEM WITH RESPECT TO HEAT LOSS AT THE INTERFACE .....</b>	<b>1740</b>
<i>Shumon Koga ; Iasson Karafyllis ; Miroslav Krstic</i>	
<b>LIGHT SOURCE TRACKING WITH QUADROTOR BY USING EXTREMUM SEEKING CONTROL .....</b>	<b>1746</b>
<i>Erdem Arinc Bulgur ; Huseyin Demircioglu ; Halil I. Basturk</i>	
<b>TUNING WINDOWED CHI-SQUARED DETECTORS FOR SENSOR ATTACKS .....</b>	<b>1752</b>
<i>Tunga R ; Carlos Murguía ; Justin Ruths</i>	
<b>CONTROL OF COMPRESSOR SURGE IN SYSTEMS WITH UNCERTAIN EQUILIBRIUM STATES .....</b>	<b>1758</b>
<i>Khalid M. Arthur ; Himadri Basu ; Se Young Yoon</i>	
<b>ANALYSIS OF FAST ADAPTIVE TRAFFIC ENGINEERING USING A FEEDBACK CONTROL MODEL .....</b>	<b>1764</b>
<i>Ning Wu ; Ao Tang</i>	
<b>MULTIVARIABLE TEMPERATURE CONTROL OF A HEATED ROD BY USING A REDUCED-ORDER INTERNAL MIDR-MODEL .....</b>	<b>1772</b>
<i>Harald Aschemann ; Andreas Rauh ; Georgy Kostin ; Vasily Saurin</i>	
<b>TRACKING CONTROL AND OBSERVER DESIGN BASED ON TAKAGI-SUGENO TECHNIQUES FOR A HYDRAULIC SERVO CYLINDER .....</b>	<b>1778</b>
<i>Robert Prabel ; Harald Aschemann</i>	
<b>TWO-WAY GAUSSIAN CHANNELS WITH AN INTELLIGENT JAMMER .....</b>	<b>1784</b>
<i>Curtis Mcdonald ; Fady Alajaji ; Serdar Yüksel</i>	
<b>THE ROLE OF COMMUNITY STRUCTURES IN SPARSE FEEDBACK CONTROL .....</b>	<b>1790</b>
<i>Wentao Tang ; Prodrornos Daoutidis</i>	
<b>GRAPH-THEORETIC ANALYSIS OF ESTIMATORS FOR STOCHASTICALLY-DRIVEN DIFFUSIVE NETWORK PROCESSES .....</b>	<b>1796</b>
<i>Sandip Roy ; Mengran Xue ; Shreyas Sundaram</i>	
<b>ON SIMULATION RELATIONS OF BOOLEAN CONTROL NETWORKS .....</b>	<b>1802</b>
<i>Rui Li ; Xuecheng Yu ; Tianguang Chu</i>	
<b>HERDABLE SYSTEMS OVER SIGNED, DIRECTED GRAPHS .....</b>	<b>1807</b>
<i>Sebastian F. Ruf ; Magnus Egerstedt ; Jeff S. Shamma</i>	
<b>PERFORMANCE OF DYNAMICAL NETWORKS OVER RANDOM GRAPHS .....</b>	<b>1813</b>
<i>Hossein K. Mousavi ; Nader Motee</i>	
<b>AN ADAPTIVE FRAMEWORK FOR THE ONLINE OPTIMAL PERIODIC CONTROL OF FEEDBACK LINEARIZABLE SYSTEMS WITH UNKNOWN PARAMETERS .....</b>	<b>1819</b>
<i>Mohammad Ghanaatpishe ; Hosam K. Fathy</i>	
<b>PERFORMANCE REFERENCE ADAPTIVE CONTROL: A JOINT QUADRATIC PROGRAMMING AND ADAPTIVE CONTROL FRAMEWORK .....</b>	<b>1827</b>
<i>Vahid Azimi ; Patricio A. Vela</i>	
<b>ON GAUSSIAN KERNEL-BASED HAMILTON-JACOBI-BELLMAN EQUATIONS FOR NONLINEAR OPTIMAL CONTROL .....</b>	<b>1835</b>
<i>Yuji Ito ; Kenji Fujimoto ; Takayoshi Yoshimura ; Yukihiko Tadokoro</i>	

<b>FUEL-OPTIMAL LOOK-AHEAD ADAPTIVE CRUISE CONTROL FOR HEAVY-DUTY VEHICLES</b> .....	1841
<i>Valerio Turri ; Oscar Flårdh ; Jonas Märtenssont ; Karl H. Johansson</i>	
<b>ENHANCED BATTERY THERMAL MANAGEMENT SYSTEMS WITH OPTIMAL CHARGE CONTROL FOR ELECTRIC VEHICLES</b> .....	1849
<i>A. Rashid ; T. Hofman ; B. Rosca</i>	
<b>ON THE OPTIMALITY OF ERGODIC TRAJECTORIES FOR INFORMATION GATHERING TASKS</b> .....	1855
<i>Louis Dressel ; Mykel J. Kochenderfer</i>	
<b>CONCENTRATION BOUNDS FOR SINGLE PARAMETER ADAPTIVE CONTROL</b> .....	1862
<i>Anders Rantzer</i>	
<b>ON THE APPROXIMATION OF TOEPLITZ OPERATORS FOR NONPARAMETRIC <math>H_\infty</math>-NORM ESTIMATION</b> .....	1867
<i>Stephen Tu ; Ross Boczar ; Benjamin Recht</i>	
<b>CONTRACTING NONLINEAR OBSERVERS: CONVEX OPTIMIZATION AND LEARNING FROM DATA</b> .....	1873
<i>Ian R. Manchester</i>	
<b>SPARSE TRANSITION MATRIX ESTIMATION FOR SUB-GAUSSIAN AUTOREGRESSIVE PROCESSES WITH MISSING DATA</b> .....	1881
<i>Amin Jalali ; Rebecca Willett</i>	
<b>PASSIVE-AGGRESSIVE LEARNING AND CONTROL</b> .....	1887
<i>Dimitar Ho ; Nikolai Matni ; John C. Doyle</i>	
<b>REGULARIZED PARAMETRIC SYSTEM IDENTIFICATION: A DECISION-THEORETIC FORMULATION</b> .....	1895
<i>Johan Wågberg ; Dave Zachariah ; Thomas B. Schön</i>	
<b>IMPROVED TRACK CONTINUITY IN MULTI TARGET TRACKING BY FUSING MULTIPLE INPUT SOURCES</b> .....	1901
<i>Jeffrey Millard ; Randy Beard</i>	
<b>AN IMPROVED ALGORITHM FOR MOTION TOMOGRAPHY BY INCORPORATING VEHICLE TRAVEL TIME</b> .....	1907
<i>Meriam Ouergli ; Fumin Zhang</i>	
<b>POSE ESTIMATION WITH DUAL QUATERNIONS AND ITERATIVE CLOSEST POINT</b> .....	1913
<i>Aksel Sveier ; Torstein A. Myhre ; Olav Egeland</i>	
<b>WIND ESTIMATION ALGORITHM FOR QUADROTORS USING DETAILED AERODYNAMIC COEFFICIENTS</b> .....	1921
<i>Gabriele Perozzi ; Denis Efimov ; Jean-Marc Biannic ; Laurent Planckaert ; Patricia Coton</i>	
<b>ROBUST NONLINEAR FILTER USING ADAPTIVE EDGEWORTH EXPANSION</b> .....	1927
<i>Dawei Li ; Ming Xin ; Bin Jia</i>	
<b>PARSIMONIOUS VOLTERRA SYSTEM IDENTIFICATION</b> .....	1933
<i>Sarah Hojjatinia ; Korkut Bekiroglu ; Constantino M. Lagoa</i>	
<b>ANGULAR MOMENTUM BASED STABILIZING CONTROL OF UNDERACTUATED MULTI-LINK PLANAR ROBOTS WITH LAST ACTIVE JOINT</b> .....	1939
<i>Xin Xin ; Makoto Ono ; Shinsaku Izumi ; Taiga Yamasaki ; Kanjian Zhang</i>	
<b>CLASSIFICATION AND STRUCTURAL EVALUATION OF FULLY-ACTUATED HEXROTOR UAVS</b> .....	1945
<i>Yuichi Tadokoro ; Tatsuya Ibuki ; Mitsuji Sampei</i>	
<b>MODELING OF SOFT MANIPULATORS WITH COUPLINGS BETWEEN ACTUATIONS AND BODY DEFORMATIONS</b> .....	1951
<i>Ben Pawlowski ; Jianguo Zhao</i>	
<b>RENDEZVOUS OF WHEELED MOBILE ROBOTS WITH SENSING AND POWER CONSTRAINTS</b> .....	1957
<i>Wei Yu ; Zhen Kan</i>	
<b>B-SPLINE TRAJECTORY PLANNING WITH CURVATURE CONSTRAINT</b> .....	1963
<i>Hiroyuki Kano ; Hiroyuki Fujioka</i>	
<b>STANCE PHASE LEG ACTUATION CONTROL OF THE ACTIVE SLIP RUNNING BASED ON VIRTUAL CONSTRAINT IN SAGITTAL PLANE</b> .....	1969
<i>Kaizheng Shan ; Haitao Yu ; Haibo Gao ; Lixian Zhang ; Zongquan Deng</i>	
<b>INTEGRATIVE APPROACH TO EXTRACT THE SINGLE-CELL DYNAMICS OF LPS-INDUCEDNFKBSIGNAL PATHWAY THROUGH FLOW CYTOMETRY MEASUREMENTS AND PARAMETER ESTIMATION</b> .....	1975
<i>Dongheon Lee ; Yufang Ding ; Arul Jayaraman ; Joseph Sang-Il Kwon</i>	



<b>SNC NEURON DETECTION METHOD BASED ON DEEP LEARNING FOR EFFICACY EVALUATION OF ANTI-PD DRUGS</b> .....	1981
<i>Shuxin Zhao ; Kaijie Wu ; Chaochen Gu ; Xiaoping Pu ; Xinping Guan</i>	
<b>A MORPHOGENETIC CELLULAR AUTOMATON</b> .....	1987
<i>Achillies Beros ; Monique Chyba ; Alexandra Fronville ; Frederic Mercier</i>	
<b>LINEAR NOISE APPROXIMATION FOR A CLASS OF PIECEWISE DETERMINISTIC MARKOV PROCESSES</b> .....	1993
<i>Saurabh Modi ; Mohammad Soltani ; Abhyudai Singh</i>	
<b>DYNAMIC MODELING OF BINDING KINETICS BETWEEN GD1B GANGLIOSIDE AND CHOLERA TOXIN SUBUNIT B</b> .....	1999
<i>Dongheon Lee ; Akshi Singla ; Hung-Jen Wu ; Joseph Sang-Il Kwon</i>	
<b>EQUILIBRIA FOR LARGE METABOLIC SYSTEMS AND THE LIFE APPROACH</b> .....	2005
<i>Sean T. Mcquade ; Zheming An ; Nathaniel J. Merrill ; Ruth E. Abrams ; Karim Azer ; Benedetto Piccoli</i>	
<b>IDENTIFICATION OF LINEAR PARAMETER-VARYING MODELS WITH UNKNOWN PARAMETER DEPENDENCE USING SUPPORT VECTOR REGRESSION</b> .....	2011
<i>Advait Datar ; Erik Schulz ; Herbert Werner</i>	
<b>PARAMETER-DEPENDENT FEEDFORWARD STRATEGIES FOR MOTION SYSTEMS</b> .....	2017
<i>T.A.H. Bloemers ; I. Proimadis ; Y. Kasemsinsup ; R. Tóth</i>	
<b>DISCRETE-TIME STATE-FEEDBACK SWITCHING LPV CONTROL WITH SEPARATE LYAPUNOV FUNCTIONS FOR STABILITY AND LOCAL PERFORMANCE</b> .....	2023
<i>Pan Zhao ; Ryozo Nagamune</i>	
<b>ROBUST PERFORMANCE FOR LPV PERIODIC DISCRETE-TIME SYSTEMS</b> .....	2029
<i>Cristiano M. Agulhari ; Márcio J. Lacerda</i>	
<b>ROBUST MOTION RECOVERY FROM NOISY STEREOSCOPIC MEASUREMENTS</b> .....	2035
<i>Jishnu Keshavan ; J. Sean Humbert</i>	
<b>INVESTIGATION OF BEHAVIOR AND SYNTHESIS OF INTERVAL DYNAMIC SYSTEMS' CHARACTERISTIC POLYNOMIALS BASED ON THE ROOT LOCUS PORTRAIT PARAMETER FUNCTION</b> .....	2041
<i>A.A. Nesenchuk</i>	
<b>DISTRIBUTED PROXIMAL AUGMENTED LAGRANGIAN METHOD FOR NONSMOOTH COMPOSITE OPTIMIZATION</b> .....	2047
<i>Sepideh Hassan-Moghaddam ; Mihailo R. Jovanovic</i>	
<b>OPTIMAL SPATIALLY-INVARIANT CONTROLLERS WITH LOCALITY CONSTRAINTS: A SYSTEM LEVEL APPROACH</b> .....	2053
<i>Emily Jensen ; Bassam Bamieh</i>	
<b>OPTIMAL OUTPUT CONSENSUS FOR A CLASS OF UNCERTAIN NONLINEAR MULTI-AGENT SYSTEMS</b> .....	2059
<i>Yutao Tang ; Xinghu Wang</i>	
<b>DISTRIBUTED DISCRETE-TIME OPTIMIZATION BY EXCHANGING ONE BIT OF INFORMATION</b> .....	2065
<i>Jiaqi Zhang ; Keyou You ; Tamer Basar</i>	
<b>DISTRIBUTED STOCHASTIC MODEL PREDICTIVE CONTROL SYNTHESIS FOR LARGE-SCALE UNCERTAIN LINEAR SYSTEMS</b> .....	2071
<i>Vahab Rostampour ; Tamás Keviczky</i>	
<b>DISTRIBUTED ECONOMIC MODEL PREDICTIVE CONTROL WITH SAFENESS-INDEX BASED CONSTRAINTS OF A NONLINEAR CHEMICAL PROCESS</b> .....	2078
<i>Fahad Albalawi ; Helen Durand ; Panagiotis D. Christofides</i>	
<b>FUZZY LOGIC BASED VARIABLE DAMPING ADMITTANCE CONTROL FOR MULTI-UAV COLLABORATIVE TRANSPORTATION</b> .....	2084
<i>Shraddha Barawkar ; Mohammadreza Radmanesh ; Manish Kumar ; Kelly Cohen</i>	
<b>A GLOBALLY STABLE CONVERGENT ALGORITHM FOR THE INTEGRATION OF CONSTRAINED MECHANICAL SYSTEMS</b> .....	2090
<i>Pierluigi Di Franco ; Giordano Scarcioni ; Alessandro Astolfi</i>	
<b>DISTRIBUTED PLANNING OF MULTI-SEGMENT SOFT ROBOTIC ARMS</b> .....	2096
<i>Wenlong Zhang ; Panagiotis Polygerinos</i>	
<b>COUPLED STATE-DEPENDENT RICCATI EQUATION CONTROL FOR CONTINUOUS TIME NONLINEAR MECHATRONICS SYSTEMS</b> .....	2102
<i>Xin Wang ; Edwin E. Yaz ; Susan C. Schneider</i>	
<b>STRAIGHT-LINE CONTOURING CONTROL OF FULLY ACTUATED 3-D BIPEDAL ROBOTIC WALKING</b> .....	2108
<i>Yan Gu ; Bin Yao ; C. S. George Lee</i>	

<b>OPTIMAL TRAJECTORY PLANNING AND FEEDBACK CONTROL OF LATERAL UNDULATION IN SNAKE-LIKE ROBOTS .....</b>	<b>2114</b>
<i>Alexander H. Chang ; Nak-Seung Patrick Hyun ; Erik I. Verriest ; Patricio A. Vela</i>	
<b>A DYNAMIC MODEL FREE OBSERVER BASED OUTPUT FEEDBACK TRACKING CONTROL OF ROBOT MANIPULATORS IN TASK-SPACE .....</b>	<b>2121</b>
<i>Necati Cobanoglu ; Kamil Cetin ; Enver Tatlicioglu ; Erkan Zergeroglu</i>	
<b>DYNAMIC ANALYSIS OF PLL-SYNCHRONIZED POWER INVERTER INTERFACE FOR GRID-CONNECTED PV SYSTEMS .....</b>	<b>2127</b>
<i>Konstantinos F. Krommydas ; Antonio T. Alexandridis</i>	
<b>HANDLING NONLINEARITY IN MODEL PREDICTIVE CONTROL WITH EXPLICIT PERFORMANCE SPECIFICATION .....</b>	<b>2133</b>
<i>Masoud Kheradmandi ; Prashant Mhaskar</i>	
<b>OUTPUT FEEDBACK TRAJECTORY TRACKING CONTROL VIA UNCERTAINTY AND DISTURBANCE ESTIMATOR .....</b>	<b>2139</b>
<i>Jiguo Dai ; Beibei Ren ; Qing-Chang Zhong</i>	
<b>STOCHASTIC OPTIMAL CONTROL USING LOCAL SAMPLE-BASED VALUE FUNCTION APPROXIMATION .....</b>	<b>2145</b>
<i>Maxim Dolgov ; Gerhard Kurz ; Daniela Grimm ; Florian Rosenthal ; Uwe D. Hanebeck</i>	
<b>PERSONALIZATION OF A GLUCOSE-INSULIN MODEL FOR DIABETIC PATIENTS .....</b>	<b>2151</b>
<i>Richard T. O'brien ; A. Eileen Dilks ; Darius J. Lukas</i>	
<b>PREDICTIVE CONTROL BASED ON NONLINEAR OBSERVER FOR MUSCULAR FORCE AND FATIGUE MODEL .....</b>	<b>2157</b>
<i>T. Bakir ; B. Bonnard ; S. Othman</i>	
<b>FAMILY-PERSONALIZED DIETARY PLANNING WITH TEMPORAL DYNAMICS .....</b>	<b>2163</b>
<i>Pedro Hespanhol ; Anil Aswani</i>	
<b>AGGREGATING STOCHASTIC GRADIENTS IN DISTRIBUTED OPTIMIZATION .....</b>	<b>2170</b>
<i>Thinh T. Doan</i>	
<b>JOINT-SPACE TRAJECTORY OPTIMIZATION OF A 7-DOF BAXTER USING MULTIVARIABLE EXTREMUM SEEKING .....</b>	<b>2176</b>
<i>Mostafa Bagheri ; Miroslav Krstic ; Peiman Naseradinmousavi</i>	
<b>REGULARIZING SAMPLED DIFFERENTIAL DYNAMIC PROGRAMMING .....</b>	<b>2182</b>
<i>Joose Rajamäki ; Perttu Hämäläinen</i>	
<b>COMBINING SOS WITH BRANCH AND BOUND TO ISOLATE GLOBAL SOLUTIONS OF POLYNOMIAL OPTIMIZATION PROBLEMS .....</b>	<b>2190</b>
<i>Brendon Colbert ; Hesameddin Mohammadi ; Matthew M. Peet</i>	
<b>STABILIZATION OF SWITCHED NONLINEAR SYSTEMS WITH DYNAMIC OUTPUT FEEDBACK AND EVENT-BASED SAMPLING .....</b>	<b>2198</b>
<i>Guangxue Zhang ; Aneel Tanwani</i>	
<b>ON ROBUSTNESS OF PRE-ASYMPTOTIC STABILITY TO DELAYED JUMPS IN HYBRID SYSTEMS .....</b>	<b>2204</b>
<i>Berk Altin ; Ricardo G. Sanfelice</i>	
<b>EXPONENTIALLY STABILIZING CONTROLLERS FOR MULTI-CONTACT 3D BIPEDAL LOCOMOTION .....</b>	<b>2210</b>
<i>Kaveh Akbari Hamed ; Robert D. Gregg ; Aaron D. Ames</i>	
<b>TIME REVERSAL SYMMETRIES AND ZERO DYNAMICS FOR SIMPLE HYBRID HAMILTONIAN CONTROL SYSTEMS .....</b>	<b>2218</b>
<i>Leonardo Colombo ; William Clark ; Anthony Bloch</i>	
<b>INPUT TO STATE STABILIZING CONTROL LYAPUNOV FUNCTIONS FOR ROBUST BIPEDAL ROBOTIC LOCOMOTION .....</b>	<b>2224</b>
<i>Shishir Kolathaya ; Jacob Reher ; Ayonga Hereid ; Aaron D. Ames</i>	
<b>A SEARCH-BASED CONTROL ARCHITECTURE FOR WHEEL-QUADRUPED ROBOT OBSTACLE NEGOTIATION .....</b>	<b>2231</b>
<i>Fei Guo ; Shoukun Wang ; Junzheng Wang</i>	
<b>TRANSITION TO HOVER FOR A FLYING WING WITH ELECTRIC PROPULSION .....</b>	<b>2237</b>
<i>Jacob Cook ; John Hauser</i>	
<b>DIFFERENTIAL FLATNESS BASED TRAJECTORY GENERATION FOR TIME-OPTIMAL HELICOPTER SHIPBOARD LANDING .....</b>	<b>2243</b>
<i>Di Zhao ; Jayanth Krishnamurthi ; Farhan Gandhi ; Sandipan Mishra</i>	
<b>FINITE-TIME GUIDANCE LAW DESIGN WITH AUTOPILOT DYNAMICS USING INPUT-TO-STATE STABILITY .....</b>	<b>2251</b>
<i>Guilin Li ; Ming Xin</i>	

<b>ROBUST GUST LOAD ALLEVIATION CONTROL USING DISTURBANCE OBSERVER FOR GENERIC FLEXIBLE WING AIRCRAFT IN CRUISING CONDITION</b> .....	2257
<i>Seung Jae Lee ; Kelley E. Hashemi ; Michael C. Drew ; Nhan T. Nguyen ; H. Jin Kim</i>	
<b>ROBUST CHATTERING-FREE CONTROL FOR FLEXIBLE AIR-BREATHING HYPERSONIC VEHICLES IN THE PRESENCE OF DISTURBANCES AND MEASUREMENT NOISES</b> .....	2264
<i>Jinlin Sun ; Jianqiang Yi ; Xiangmin Tan ; Zhiqiang Pu</i>	
<b>MAXIMUM ENDURANCE OF A TURBOFAN IN CRUISE WITH HEAD OR TAIL-WIND</b> .....	2270
<i>Emily Oelberg ; Luis Rodrigues</i>	
<b>A DATA SELECTION STRATEGY FOR REAL-TIME ESTIMATION OF BATTERY PARAMETERS</b> .....	2276
<i>Xinfan Lin</i>	
<b>A BATTERY PACK RECONFIGURATION SCHEME FOR IMPROVED CHARGE BALANCING</b> .....	2282
<i>Mark Ditsworth ; Stephen Yurkovich</i>	
<b>BEYOND ESTIMATING BATTERY STATE OF HEALTH: IDENTIFIABILITY OF INDIVIDUAL ELECTRODE CAPACITY AND UTILIZATION</b> .....	2288
<i>Suhak Lee ; Peyman Mohtat ; Jason B. Siegel ; Anna G. Stefanopoulou</i>	
<b>LITHIUM-ION BATTERY STATE ESTIMATION FOR A SINGLE PARTICLE MODEL WITH INTERCALATION-INDUCED STRESS</b> .....	2294
<i>Dong Zhang ; Satadru Dey ; Scott J. Moura</i>	
<b>OPTIMAL INPUT DESIGN FOR PARAMETER IDENTIFICATION IN AN ELECTROCHEMICAL LI-ION BATTERY MODEL</b> .....	2300
<i>Saehong Park ; Dylan Kato ; Zach Gima ; Reinhardt Klein ; Scott Moura</i>	
<b>INTEGRATION OF NON-MONOTONIC CELL SWELLING CHARACTERISTIC FOR STATE- OF-CHARGE ESTIMATION</b> .....	2306
<i>Tomáš Polóni ; Miriam Aileen Figueroa-Santos ; Jason B. Siegel ; Anna G. Stefanopoulou</i>	
<b>ADAPTIVE MPC WITH CHANCE CONSTRAINTS FOR FIR SYSTEMS</b> .....	2312
<i>Monimoy Bujarbaruah ; Xiaojing Zhang ; Francesco Borrelli</i>	
<b>HIGH-PERFORMANCE COOPERATIVE DISTRIBUTED MODEL PREDICTIVE CONTROL FOR LINEAR SYSTEMS</b> .....	2318
<i>Georgios Darivianakis ; Salar Fattahi ; John Lygeros ; Javad Lavaei</i>	
<b>ERYTHROPOIESIS-STIMULATING-AGENT DOSE OPTIMIZATION FOR ANEMIA MANAGEMENT IN CHRONIC KIDNEY DISEASE USING RECURSIVE CONSTRAINED MODELING AND ZONE MODEL PREDICTIVE CONTROL</b> .....	2326
<i>Jayson Mcallister ; Jinfeng Liu ; Zukui Li ; Ulrich Simonsmeier</i>	
<b>TWO-LEVEL HIERARCHICAL MISSION-BASED MODEL PREDICTIVE CONTROL</b> .....	2332
<i>Justin P. Koeln ; Andrew G. Alleyne</i>	
<b>CONTROL SYNTHESIS FOR BILEVEL LINEAR MODEL PREDICTIVE CONTROL</b> .....	2338
<i>Yonatan Mintz ; John Audie Cabrera ; Jhoanna Rhodette Pedrasa ; Anil Aswani</i>	
<b>NON-ITERATIVE DISTRIBUTED MODEL PREDICTIVE CONTROL WITH EVENT- TRIGGERED COMMUNICATION</b> .....	2344
<i>Felix Berkel ; Steven Liu</i>	
<b>ROBUSTLY COMPLETE REACH-AND-STAY CONTROL SYNTHESIS FOR SWITCHED SYSTEMS VIA INTERVAL ANALYSIS</b> .....	2350
<i>Yinan Li ; Jun Liu</i>	
<b>A COMPOSITIONAL APPROACH TO REACTIVE GAMES UNDER TEMPORAL LOGIC SPECIFICATIONS</b> .....	2356
<i>Abhishek Ninad Kulkarni ; Jie Fu</i>	
<b>OPTIMAL MULTI-VALUED LTL PLANNING FOR SYSTEMS WITH ACCESS RIGHT LEVELS</b> .....	2363
<i>Mohammad Hekmatnejad ; Georgios Fainekos</i>	
<b>VERIFICATION OF MARKOV DECISION PROCESSES WITH RISK-SENSITIVE MEASURES</b> .....	2371
<i>Murat Cubuktepe ; Ufuk Topcu</i>	
<b>HIERARCHICAL CONTROL VIA AN APPROXIMATE AGGREGATE MANIFOLD</b> .....	2378
<i>Stanley W. Smith ; Murat Arcak ; Majid Zamani</i>	
<b>A TOOLCHAIN FOR VERIFYING SAFETY PROPERTIES OF HYBRID AUTOMATA VIA PATTERN TEMPLATES</b> .....	2384
<i>Goran Frehse ; Nikolaos Kekatos ; Dejan Nickovic ; Jens Oehlerking ; Simone Schuler ; Alexander Walsch ; Matthias Woehrl</i>	
<b>REAL-TIME OPTIMIZATION AND MODEL PREDICTIVE CONTROL FOR AEROSPACE AND AUTOMOTIVE APPLICATIONS</b> .....	2392
<i>Stefano Di Cairano ; Ilya V. Kolmanovsky</i>	

<b>A TUTORIAL ON REAL-TIME CONVEX OPTIMIZATION BASED GUIDANCE AND CONTROL FOR AEROSPACE APPLICATIONS .....</b>	<b>2410</b>
<i>Yuanqi Mao ; Michael Szmuk ; Behçet Açikmese</i>	
<b>MODEL PREDICTIVE CONTROL FOR AIRCRAFT LOAD ALLEVIATION: OPPORTUNITIES AND CHALLENGES .....</b>	<b>2417</b>
<i>Michael Kopf ; Eric Bullinger ; Hans-Gerd Giesseler ; Stephan Adden ; Rolf Findeisen</i>	
<b>TOWARD REAL-TIME AUTOMOTIVE MODEL PREDICTIVE CONTROL: A PERSPECTIVE FROM A DIESEL AIR PATH CONTROL DEVELOPMENT .....</b>	<b>2425</b>
<i>Mike Huang ; Dominic Liao-Mcpherson ; Shinhoon Kim ; Ken Butts ; Ilya Kolmanovsky</i>	
<b>HIGH-FREQUENCY EXHAUST PORT PRESSURE ESTIMATION USING A REDUCED ORDER WAVE ACTION MODEL .....</b>	<b>2431</b>
<i>Stephanie Stockar ; Marcello Canova ; Baitao Xiao ; Julia Buckland ; Wen Dai</i>	
<b>NONLINEAR MODEL PREDICTIVE CONTROL OF DUAL LOOP - EXHAUST GAS RECIRCULATION IN A TURBOCHARGED SPARK IGNITED ENGINE .....</b>	<b>2437</b>
<i>Rohit Koli ; Harikesh Arunachalam ; Qilun Zhu ; Simona Onori ; Ardalan Vahidi ; Robert Prucka</i>	
<b>MODEL-BASED SELECTIVE CYLINDER DEACTIVATION STRATEGIES IN AN INLINE FOUR CYLINDER GASOLINE ENGINE .....</b>	<b>2443</b>
<i>Ahmed Yar ; Qadeer Ahmed ; Carrie Hall ; Amer Iqbal Bhatti</i>	
<b>OPTIMAL PROFILE TRACKING FOR AN ELECTRO-HYDRAULIC VARIABLE VALVE ACTUATOR USING TRAJECTORY LINEARIZATION .....</b>	<b>2449</b>
<i>Huan Li ; Guoming G. Zhu ; Ying Huang ; Donghao Hao</i>	
<b>DYNAMIC PRESSURE RATIO ALLOCATION FOR ELECTRIC SUPERCHARGER AND TURBOCHARGER COORDINATION .....</b>	<b>2455</b>
<i>Baitao Xiao ; Erik Hellstrom ; Tyler Kelly ; Timothy Stolzenfeld ; Dave Bell ; Mrdjan Jankovic ; Julia Buckland ; John Rollinger</i>	
<b>DISTRIBUTED MODEL PREDICTIVE CONTROL OF AN ELECTRICALLY BOOSTED DIESEL ENGINE AIR PATH SYSTEM .....</b>	<b>2461</b>
<i>Yuxing Liu ; Yue-Yun Wang ; Marcello Canova</i>	
<b>SEMI-GLOBAL LEADER-FOLLOWING OUTPUT CONSENSUS OF MULTI-AGENT SYSTEMS WITH INPUT SATURATION: THE STATE FEEDBACK CASE .....</b>	<b>2467</b>
<i>Liangren Shi ; Yuanlong Li ; Zongli Lin</i>	
<b>DISTRIBUTED APPROACH TO DYNAMIC QUANTIZATION FOR MULTI-AGENT SYSTEMS .....</b>	<b>2473</b>
<i>Shashank Jadhav ; Adwait Datar ; Herbert Werner</i>	
<b>INTEGRATING A PCA LEARNING ALGORITHM WITH THE SUSL STRATEGY FOR A COLLECTIVE SOURCE SEEKING BEHAVIOR .....</b>	<b>2479</b>
<i>Said Al-Abri ; Sean Maxon ; Fumin Zhang</i>	
<b>A MEMORY WEIGHTED PROTOCOL FOR SAMPLED-DATA SYSTEMS SUBJECTED TO PACKET DROPOUTS .....</b>	<b>2485</b>
<i>Adwait Datar ; Daniel Schneider ; Furugh Mirali ; Herbert Werner ; Hannes Frey</i>	
<b>AN OUTPUT-BASED DISTRIBUTED OBSERVER AND ITS APPLICATION .....</b>	<b>2491</b>
<i>Tao Liu ; Jie Huang</i>	
<b>COMPATIBLE FORMATION SET FOR UAVS WITH VISUAL SENSING CONSTRAINT .....</b>	<b>2497</b>
<i>Xiaoli Li ; Ying Tan ; Iven Mareels ; Xiang Chen</i>	
<b>ADAPTIVE ATTITUDE CONTROL OF A DUAL-RIGID-BODY SPACECRAFT WITH UNMODELED NONMINIMUM-PHASE DYNAMICS .....</b>	<b>2503</b>
<i>Zhanzhan Zhao ; Gerardo Cruz ; Taeyoung Lee ; Dennis S. Bernstein</i>	
<b>AN ADAPTIVE CONSENSUS CONTROL SCHEME FOR MULTI-AGENT SYSTEMS WITH PERSISTENT SWITCHING TOPOLOGY .....</b>	<b>2509</b>
<i>Ge Song ; Gang Tao</i>	
<b>ONLINE APPROXIMATE OPTIMAL PATH-PLANNER IN THE PRESENCE OF MOBILE AVOIDANCE REGIONS .....</b>	<b>2515</b>
<i>Patryk Deptula ; Ryan A. Licitra ; Joel A. Rosenfeld ; Warren E. Dixon</i>	
<b>DATA-BASED REINFORCEMENT LEARNING APPROXIMATE OPTIMAL CONTROL FOR AN UNCERTAIN NONLINEAR SYSTEM WITH PARTIAL LOSS OF CONTROL EFFECTIVENESS .....</b>	<b>2521</b>
<i>Patryk Deptula ; Zachary I. Bell ; Emily A. Doucette ; J. Willard Curtis ; Warren E. Dixon</i>	
<b>ADAPTIVE REGULATION OF HYPERSONIC VEHICLE SYSTEMS WITH PARTIAL NONLINEAR PARAMETRIZATION .....</b>	<b>2527</b>
<i>Shaohua Yang ; Gang Tao ; Yanjun Zhang ; Wei Lin</i>	
<b>DUAL-RATE ADAPTIVE DECOUPLING CONTROLLER AND ITS APPLICATION TO A DUAL-TANK WATER SYSTEM .....</b>	<b>2533</b>
<i>Y. Fu ; Q. Du ; X. J. Zhuo ; T. Y. Chai</i>	

<b>FLATNESS-BASED CONSTRAINED OPTIMAL CONTROL OF REACTION-DIFFUSION SYSTEMS</b> .....	2539
<i>Julian Andrej ; Thomas Meurer</i>	
<b>INTEGRATED OBSERVER AND SENSOR PLACEMENT DESIGN OF PARABOLIC PDES USING MODIFIED CENTROIDAL VORONOI TESSELLATIONS</b> .....	2545
<i>Michael A. Demetriou</i>	
<b>THERMODYNAMIC MODELING AND CONTROL OF SCREW EXTRUDER FOR 3D PRINTING</b> .....	2551
<i>Shumon Koga ; David Straub ; Mamadou Diagne ; Miroslav Krstic</i>	
<b>DISSIPATIVE DISTRIBUTED PARAMETER SYSTEMS ON-LINE REDUCTION AND CONTROL USING DEIM/APOD COMBINATION</b> .....	2557
<i>Manda Yang ; Antonios Armaou</i>	
<b>STATE OBSERVER DESIGN FOR DIRECT CONTACT MEMBRANE DISTILLATION PARABOLIC SYSTEMS</b> .....	2563
<i>Mohamed Ghattassi ; Jean-Claude Vivalda ; Taous Meriem Laleg-Kirati</i>	
<b>LINEAR MODEL PREDICTIVE CONTROL FOR SCHRÖDINGER EQUATION*</b> .....	2569
<i>Jukka-Pekka Humaloja ; Stevan Dujljevic</i>	
<b>CONTROL OF A RELOCATABLE ENERGY-HARVESTING AUTONOMOUS UNDERWATER VEHICLE IN A SPATIOTEMPORALLY-VARYING GULF STREAM RESOURCE</b> .....	2575
<i>Shamir Bin-Karim ; Mike Muglia ; Andre Mazzoleni ; Christopher Vermillion</i>	
<b>SWITCHING GAIN-SCHEDULED LINEAR-QUADRATIC-REGULATOR CONTROL FOR INTEGRATED SOLAR THERMAL HYDRONIC SYSTEMS</b> .....	2581
<i>Mohammadreza Rostam ; Ryozo Nagamune ; Vladimir Grebenyuk</i>	
<b>VEHICLE VELOCITY STATE ESTIMATION USING YOULA CONTROLLER OUTPUT OBSERVER</b> .....	2587
<i>Jose Velazquez Alcantar ; Francis Assadian ; Ming Kuang</i>	
<b>SENSITIVITY-BASED ROAD FRICTION ESTIMATION IN VEHICLE DYNAMICS USING THE UNSCENTED KALMAN FILTER</b> .....	2593
<i>Mark Wielitzka ; Matthias Dagen ; Tobias Ortmaier</i>	
<b>AUTOMATIC LANDING CONTROL OF A VERY FLEXIBLE FLYING WING</b> .....	2599
<i>Pengyuan Qi ; Xiaowei Zhao ; Yinan Wang ; Rafael Palacios ; Andrew Wynn</i>	
<b>MODEL-BASED FEEDBACK CONTROL OF OIL PRODUCTION IN OIL-RIM RESERVOIRS UNDER GAS CONING CONDITIONS</b> .....	2605
<i>Prashanth Siddhamshetty ; Joseph Sang-Il Kwon</i>	
<b>JOINT TRANSMISSION POWER OPTIMIZATION AND CONNECTIVITY CONTROL IN ASYMMETRIC NETWORKS</b> .....	2611
<i>Milad Esmacilpour ; Amir G. Aghdam ; Stephane Blouin</i>	
<b>OPTIMAL SPARSELY DISTRIBUTED STATIC OUTPUT FEEDBACK FOR PUBLISHER/SUBSCRIBER NETWORKED SYSTEMS WITH PARAMETRIC UNCERTAINTIES</b> .....	2617
<i>Ahmadreza Argha ; Steven W. Su ; Branko Celler</i>	
<b>POWER MANAGEMENT FOR CONTROLLING EVENT DETECTION PROBABILITY OF SUPERCAPACITOR POWERED SENSOR NETWORKS</b> .....	2623
<i>Ruizhi Chai ; Ying Zhang ; Geng Sun ; Hongsheng Li</i>	
<b>A NOVEL DECOMPOSITION FOR CONTROL OF DC CIRCUITS AND GRID MODELS WITH HETEROGENEOUS ENERGY SOURCES</b> .....	2630
<i>Shuai Wang ; John Baillieul</i>	
<b>STABILITY PROPERTIES OF A MIMO DATA FLOW CONTROLLER</b> .....	2638
<i>Ramón A. Delgado ; Torbjörn Wigren ; Katrina Lau ; Richard H. Middleton</i>	
<b>CURING WITH THE NETWORK POLYA CONTAGION MODEL</b> .....	2644
<i>Mikhail Hayhoe ; Fady Alajaji ; Bahman Ghahesifard</i>	
<b>A CONJUGATE UNSCENTED TRANSFORM-BASED SCHEME FOR OPTIMAL CONTROL WITH TERMINAL STATE CONSTRAINTS</b> .....	2651
<i>Michael Mercurio ; Puneet Singla ; Manoranjan Majji</i>	
<b>HIERARCHICAL H<sub>2</sub> CONTROL OF LARGE-SCALE NETWORK DYNAMIC SYSTEMS</b> .....	2657
<i>Nan Xue ; Aranya Chakraborty</i>	
<b>ITERATIVE H<sub>2</sub>-CONIC CONTROLLER SYNTHESIS</b> .....	2663
<i>Leila Jasmine Bridgeman ; James Richard Forbes</i>	
<b>SPARSE OPTIMAL CONTROL OF LTI SYSTEMS UNDER SPARSITY-DEPENDENT DELAYS</b> .....	2669
<i>Nandini Negi ; Aranya Chakraborty</i>	
<b>OPTIMAL SELF-POWERED CONTROL OF DYNAMIC SYSTEMS: DUALITY TECHNIQUES</b> .....	2675
<i>Alyssa Kody ; Jeffrey Scruggs</i>	

<b>PERIODIC CONTROL OF UNMANNED AERIAL VEHICLES BASED ON DIFFERENTIAL FLATNESS .....</b>	<b>2681</b>
<i>Oladapo Ogunbodede ; Souransu Nandi ; Tarunraj Singh</i>	
<b>SEGREGATED LINEAR DECISION RULES FOR DISTRIBUTIONALLY ROBUST CONTROL WITH LINEAR DYNAMICS AND QUADRATIC COST .....</b>	<b>2687</b>
<i>Jiangliang Jin ; Yunjian Xu</i>	
<b><math>H_\infty</math> STATIC OUTPUT-FEEDBACK CONTROLLERS WITH PAST OUTPUTS FOR DISCRETE-TIME UNCERTAIN LINEAR SYSTEMS.....</b>	<b>2695</b>
<i>Luciano Frezzatto ; Ricardo C. L. F. Oliveira ; Pedro L. D. Peres</i>	
<b>SECONDARY CONTROLLER WITH ADDITIONAL DISTURBANCE REJECTION IN <math>H_\infty</math> FRAMEWORK: MOTIVATED BY DISTURBANCE OBSERVER .....</b>	<b>2701</b>
<i>Hyung-Tae Seo ; Kyung-Soo Kim</i>	
<b>FUNDAMENTAL LIMITS AND ACHIEVABLE PERFORMANCE IN BIOMOLECULAR CONTROL .....</b>	<b>2707</b>
<i>Yorie Nakahira ; Fangzhou Xiao ; Victoria Kostina ; John C. Doyle</i>	
<b>BACKSTEPPING TRACKING CONTROL DESIGN FOR A TRACTOR ROBOT PULLING MULTIPLE TRAILERS.....</b>	<b>2715</b>
<i>Negin Lashkari ; Mohammad Biglarbegian ; Simon X. Yang</i>	
<b>FINITE TIME ROBUST CONTROL OF THE SIT-TO-STAND MOVEMENT FOR POWERED LOWER LIMB ORTHOSES .....</b>	<b>2721</b>
<i>Octavio Narvaez-Arocho ; Andrew Packard ; Murat Arcak</i>	
<b>CLOUD-AIDED COLLABORATIVE ESTIMATION BY ADMM-RLS ALGORITHMS FOR CONNECTED DIAGNOSTICS AND PROGNOSTICS.....</b>	<b>2727</b>
<i>Valentina Breschi ; Ilya Kolmanovsky ; Alberto Bemporad</i>	
<b>OPTIMAL OBSERVER DESIGN FOR DISTURBED STATE AFFINE SYSTEMS.....</b>	<b>2733</b>
<i>Francisco González De Cossío ; Madiha Nadri ; Pascal Dufour</i>	
<b>ON ADDRESSING HYSTERESIS IN MAGNETIC POSITION ESTIMATION.....</b>	<b>2739</b>
<i>Ryan Madson ; Rajesh Rajamani</i>	
<b>APPROXIMATE NOISE-ADAPTIVE FILTERING USING STUDENT-T DISTRIBUTIONS .....</b>	<b>2745</b>
<i>Karl Berntorp ; Stefano Di Cairano</i>	
<b>STATE AND PARAMETER ESTIMATION FOR A CLASS OF NONLINEARLY PARAMETERIZED SYSTEMS USING SLIDING MODE TECHNIQUES.....</b>	<b>2751</b>
<i>Kangkang Zhang ; Bin Jiang ; Xinggang Yan ; Zehui Mao ; Jun Shen</i>	
<b>DATA DRIVEN SPATIO-TEMPORAL MODELING OF PARKING DEMAND .....</b>	<b>2757</b>
<i>Tanner Fiez ; Lillian J. Ratliff ; Chase Dowling ; Baosen Zhang</i>	
<b>A NONLINEAR OPTIMAL CONTROL APPROACH FOR AUTONOMOUS MOTORCYCLES.....</b>	<b>2763</b>
<i>G. Rigatos ; P. Siano ; P. Wira ; M. Abbaszadeh</i>	
<b>LANDMARK PLACEMENT FOR LOCALIZATION IN A GPS-DENIED ENVIRONMENT .....</b>	<b>2769</b>
<i>Kaarthik Sundar ; Shriram Srinivasan ; Sohun Misra ; Sivakumar Rathinam ; Rajnikant Sharma</i>	
<b>OBSTACLE AVOIDANCE VIA LANDMARK CLUSTERING IN A PATH-PLANNING ALGORITHM .....</b>	<b>2776</b>
<i>Gaetano Tartaglione ; Marco Ariola</i>	
<b>ENERGY-AWARE PERSISTENT CONTROL OF HETEROGENEOUS ROBOTIC SYSTEMS .....</b>	<b>2782</b>
<i>Tony X. Lin ; Esen Yel ; Nicola Bezzo</i>	
<b>LOCALIZABILITY-CONSTRAINED DEPLOYMENT OF MOBILE ROBOTIC NETWORKS WITH NOISY RANGE MEASUREMENTS .....</b>	<b>2788</b>
<i>Jerome Le Ny ; Simon Chauvière</i>	
<b>STABILITY AND CONVERGENCE ANALYSIS OF A DECENTRALIZED PROPORTIONAL-INTEGRAL CONTROL STRATEGY FOR COLLECTIVE TRANSPORT .....</b>	<b>2794</b>
<i>Hamed Farivarnejad ; Spring Berman</i>	
<b>THE STRUCTURED CONTROLLABILITY RADIUS OF SYMMETRIC (BRAIN) NETWORKS.....</b>	<b>2802</b>
<i>Tommaso Menara ; Vaibhav Katewa ; Danielle S. Bassett ; Fabio Pasqualetti</i>	
<b>SYNCHRONIZING AND DESYNCHRONIZING NEURAL POPULATIONS THROUGH PHASE DISTRIBUTION CONTROL.....</b>	<b>2808</b>
<i>Bharat Monga ; Gary Froyland ; Jeff Moehlis</i>	
<b>DEALING WITH UNKNOWN UNKNOWN: IDENTIFICATION AND SELECTION OF MINIMAL SENSING FOR FRACTIONAL DYNAMICS WITH UNKNOWN INPUTS.....</b>	<b>2814</b>
<i>Gaurav Gupta ; Sérgio Pequito ; Paul Bogdan</i>	
<b>RECOVERING OBSERVABILITY VIA ACTIVE SENSING.....</b>	<b>2821</b>
<i>Abhinav Kunaparedy ; Noah J. Cowan</i>	
<b>LEARNING-BASED APPROACHES FOR CONTROLLING NEURAL SPIKING .....</b>	<b>2827</b>
<i>Sensen Liu ; Noah M. Sock ; Shinung Ching</i>	

<b>IDENTIFICATION OF STATE-SPACE LINEAR TIME-VARYING SYSTEMS WITH SUM-OF-NORMS REGULARIZATION .....</b>	<b>2833</b>
<i>Cassiano O. Becker ; Victor M. Preciado</i>	
<b>THE FCC STABILITY CRITERION FOR FRACTIONAL-ORDER LINEAR TIME-INVARIANT SYSTEMS WITH COMMENSURATE OR INCOMMENSURATE ORDERS .....</b>	<b>2839</b>
<i>Arman Dabiri ; Eric A. Butcher</i>	
<b>NEW PERSPECTIVES ON CRITICALITY OF MULTIPLE IDENTICAL IMAGINARY ROOTS (MIR) IN TIME-DELAYED SYSTEMS .....</b>	<b>2845</b>
<i>Ryan Jenkins ; Nejat Olgac</i>	
<b>A NEW, NECESSARY AND SUFFICIENT CONDITION FOR HURWITZ STABILITY OF A REAL MATRIX WITHOUT CHARACTERISTIC POLYNOMIAL, USING QUALITATIVE REASONING .....</b>	<b>2851</b>
<i>Rama K. Yedavalli</i>	
<b>SPATIO-TEMPORAL IMPULSE RESPONSES IN CHANNEL FLOW OF VISCOELASTIC FLUIDS .....</b>	<b>2857</b>
<i>Gokul Hariharan ; Mihailo R. Jovanovic ; Satish Kumar</i>	
<b>SCALABLE STABILITY ANALYSIS FOR HOMOGENEOUS NETWORKS OF DYNAMICAL SYSTEMS INTERACTING VIA APERIODIC SAMPLED-DATA CHANNELS .....</b>	<b>2863</b>
<i>Mark A. Fabbro ; Michael Cantoni</i>	
<b>COMPUTING REGIONS OF STABILIZABILITY FOR NONLINEAR CONTROL SYSTEMS WITH INPUT CONSTRAINTS .....</b>	<b>2869</b>
<i>Philipp Schlehuber-Caissier ; Nicolas Perrin</i>	
<b>ON PSEUDO-PERTURBATION-BASED BROADCAST CONTROL OF MULTI-AGENT SYSTEMS .....</b>	<b>2877</b>
<i>Yuji Ito ; Md Abdus Samad Kamal ; Takayoshi Yoshimura ; Shun-Ichi Azuma</i>	
<b>FINITE-TIME DISTRIBUTED EVENT-TRIGGERED CONSENSUS CONTROL FOR GENERAL LINEAR MULTI-AGENT SYSTEMS .....</b>	<b>2883</b>
<i>Changkun Du ; Xiangdong Liu ; Haikuo Liu ; Pingli Lu</i>	
<b>RESILIENT EVENT-TRIGGERED CONSENSUS WITH EXPONENTIAL CONVERGENCE IN MULTI-AGENT SYSTEMS .....</b>	<b>2889</b>
<i>Amir Amini ; Arash Mohammadi ; Amir Asif</i>	
<b>DISTRIBUTED LOCALIZATION OF A MOVING TARGET: STRUCTURAL OBSERVABILITY-BASED CONVERGENCE ANALYSIS .....</b>	<b>2897</b>
<i>Osama Ennasr ; Xiaobo Tan</i>	
<b>CONTROL OF LARGE SWARMS VIA RANDOM FINITE SET THEORY .....</b>	<b>2904</b>
<i>Bryce Doerr ; Richard Linares</i>	
<b>TRANSLATIONAL MANEUVERING CONTROL OF NONHOLONOMIC KINEMATIC FORMATIONS: THEORY AND EXPERIMENTS .....</b>	<b>2910</b>
<i>Milad Khaledyan ; Marcio De Queiroz</i>	
<b>INTERNAL MODEL CONTROL OF CYCLOID TRAJECTORY FOR VIDEO-RATE AFM IMAGING WITH A SOI-MEMS NANOPositionER .....</b>	<b>2916</b>
<i>Afshin Alipour ; Nastaran Nikooienejad ; Mohammad Maroufi ; S. O. Reza Moheimani</i>	
<b>ITERATIVE LEARNING-BASED MODEL PREDICTIVE CONTROL FOR PRECISE TRAJECTORY TRACKING OF PIEZO NANOPositionING STAGE .....</b>	<b>2922</b>
<i>Shengwen Xie ; Juan Ren</i>	
<b>MODEL PREDICTIVE CONTROL OF SELF-PROPELLED WORK MACHINES WITH SPATIAL DISTURBANCE PREVIEW .....</b>	<b>2928</b>
<i>Tobias Peschke ; Philipp Münch ; Daniel Görge</i>	
<b>A MODEL-BASED INFERENCE FEEDFORWARD APPROACH TO DEAL WITH HYSTERESIS IN A MOTION SYSTEM .....</b>	<b>2934</b>
<i>Raja Ganapathy Subramanian ; Marcel Heertjes ; Thomas De Hoog</i>	
<b>CONTROL-ORIENTED MODELLING OF THE TRANSIENT BEHAVIOUR OF HYDRODYNAMIC COUPLINGS: A STATE-SPACE APPROACH .....</b>	<b>2940</b>
<i>Klemens Kranawetter ; Richard Seeber ; Robert Bauer ; Martin Horn</i>	
<b>DESIGN OF A HIGH-SPEED AND HIGH-PRECISION HYBRID SCANNER WITH A NEW PATH PLANNING STRATEGY BASED ON SPATIAL ENTROPY .....</b>	<b>2946</b>
<i>Da-Wei Liu ; Huang-Chih Chen ; Kuang-Yao Chang ; Meng-Hao Chou ; Yi-Lin Liu ; Jim-Wei Wu ; Ming-Li Chiang ; Li-Chen Fu</i>	
<b>A NOVEL DYNAMIC IDA-PBC CONTROLLER FOR ELECTROSTATIC MEMS DEVICES .....</b>	<b>2952</b>
<i>Mutaz Ryalat ; Dina Shona Laila ; Natheer Almtireen ; Hisham Elmoaqet</i>	

<b>PASSIVITY-BASED CONTROL WITH A GENERALIZED ENERGY STORAGE FUNCTION FOR ROBUST WALKING OF BIPED ROBOTS .....</b>	<b>2958</b>
<i>Mark R. Yeatman ; Ge Lv ; Robert D. Gregg</i>	
<b>INPUT-OUTPUT STABILITY DESIGN OF AN AMMONIUM BASED AERATION CONTROLLER FOR WASTEWATER TREATMENT .....</b>	<b>2964</b>
<i>Tatiana Chistiakova ; Torbjörn Wigren ; Bengt Carlsson</i>	
<b>DUAL MODE EXTREMUM-SEEKING CONTROL VIA LIE-BRACKET AVERAGING APPROXIMATIONS .....</b>	<b>2972</b>
<i>Martin Guay ; Khalid Tourkey Atta</i>	
<b>STABILIZATION WITH IMPRECISE MEASUREMENTS: APPLICATION TO A VISION BASED LANDING PROBLEM .....</b>	<b>2978</b>
<i>Frédéric Mazenc ; Laurent Burlion ; Victor Gibert</i>	
<b>NONCAUSAL ZAMES-FALB MULTIPLIERS FOR TIGHTER ESTIMATES OF EXPONENTIAL CONVERGENCE RATES.....</b>	<b>2984</b>
<i>Randy A. Freeman</i>	
<b>EXTREMUM-SEEKING CONTROL FOR STEADY-STATE PERFORMANCE OPTIMIZATION OF NONLINEAR PLANTS WITH TIME-VARYING STEADY-STATE OUTPUTS .....</b>	<b>2990</b>
<i>Leroy Hazeleger ; Mark Haring ; Nathan Van De Wouw</i>	
<b>RECEDING HORIZON CONTROL FOR SPACECRAFT WITH LOW-THRUST PROPULSION .....</b>	<b>2996</b>
<i>Suwat Sreesawet ; Atri Dutta</i>	
<b>REAL-TIME OPTIMIZATION OF A SOLAR-NATURAL GAS HYBRID POWER PLANT TO ENHANCE SOLAR POWER UTILIZATION .....</b>	<b>3002</b>
<i>Khalid Rashid ; Moataz N. Sheha ; Kody M. Powell</i>	
<b>USING PREDICTIONS IN ONLINE OPTIMIZATION WITH SWITCHING COSTS: A FAST ALGORITHM AND A FUNDAMENTAL LIMIT .....</b>	<b>3008</b>
<i>Yingying Li ; Guannan Qu ; Na Li</i>	
<b>THE INITIALIZATION OF BASAL SLIDING COEFFICIENTS FOR ANTARCTICA A LYAPUNOV BASED APPROACH .....</b>	<b>3014</b>
<i>Firas Mourad ; Emmanuel Witrant ; Frank Pattyn</i>	
<b>DATA-DRIVEN ADAPTIVE ROBUST OPTIMIZATION FRAMEWORK BASED ON PRINCIPAL COMPONENT ANALYSIS .....</b>	<b>3020</b>
<i>Chao Ning ; Fengqi You</i>	
<b>SYNTHESIS OF INSERTION FUNCTIONS TO ENFORCE DECENTRALIZED AND JOINT OPACITY PROPERTIES OF DISCRETE-EVENT SYSTEMS .....</b>	<b>3026</b>
<i>Bo Wu ; Jin Dai ; Hai Lin</i>	
<b>PARAMETER AND INSERTION FUNCTION CO-SYNTHESIS FOR OPACITY ENHANCEMENT IN PARAMETRIC STOCHASTIC DISCRETE EVENT SYSTEMS .....</b>	<b>3032</b>
<i>Bo Wu ; Zhiyu Liu ; Hai Lin</i>	
<b>EXPLICIT COMPUTATION OF SAMPLING PERIOD IN PERIODIC EVENT-TRIGGERED MULTI-AGENT CONTROL .....</b>	<b>3038</b>
<i>Pian Yu ; Dimos V. Dimarogonas</i>	
<b>DATA-DRIVEN CONTROLLER DESIGN FOR BOOLEAN CONTROL NETWORKS .....</b>	<b>3044</b>
<i>Thomas Leifeld ; Zhihua Zhang ; Ping Zhang</i>	
<b>TASK ALLOCATION POLICY FOR UGV SYSTEMS USING COLORED PETRI NETS.....</b>	<b>3050</b>
<i>Xiaojun Wang ; Feng Rui ; Hesuan Hu</i>	
<b>NON-INTERFERENCE ASSESSMENT IN BOUNDED PETRI NETS VIA INTEGER LINEAR PROGRAMMING .....</b>	<b>3056</b>
<i>F. Basile ; G. De Tommasi</i>	
<b>NONLINEAR ADAPTIVE CONTROL DESIGN FOR POWER SYSTEM WITH STATCOM DEVICE .....</b>	<b>3062</b>
<i>Moath H. Alqatamin ; M. L. McIntyre ; Joseph Latham ; Pablo Rivera ; Nicholas Hawkins</i>	
<b>MULTI-OBJECTIVE OPTIMAL TUNING OF THE MULTI-LOOP PITCH CONTROL SYSTEMS OF A WIND TURBINE .....</b>	<b>3068</b>
<i>Anshu Behera ; Adrian Gambier</i>	
<b>ON THE ARCHITECTURE OF WIND TURBINE CONTROL REQUIRED FOR INDUCTION-BASED OPTIMAL WIND FARM CONTROL .....</b>	<b>3074</b>
<i>J. Kazda ; M. Mirzaei ; N. A. Cutululis</i>	
<b>UNBALANCED FAULT DIAGNOSIS IN TRANSMISSION NETWORKS USING MULTIPLE MODEL FILTERS .....</b>	<b>3080</b>
<i>Mustafa Salman ; N. Eva Wu ; Morteza Sarailoo ; John S. Bay</i>	
<b>FRACTIONAL ORDER PROPORTIONAL-RESONANT CONTROLLER.....</b>	<b>3086</b>
<i>Hadi Malek ; Sara Dadras ; Chun Yin ; Yangquan Chen</i>	



<b>DISTRIBUTED EQUILIBRIUM-LEARNING FOR POWER NETWORK VOLTAGE CONTROL WITH A LOCALLY CONNECTED COMMUNICATION NETWORK.....</b>	<b>3092</b>
<i>Kaiqing Zhang ; Wei Shi ; Hao Zhu ; Tamer Basar</i>	
<b>OPTIMAL LIGHTING CONTROL STRATEGY FOR LIGHTING SYSTEM BASED ON MULTIVARIABLE FRACTIONAL-ORDER EXTREMUM SEEKING METHOD.....</b>	<b>3098</b>
<i>Chun Yin ; Sara Dadras ; Xuegang Huang ; Hadi Malek ; Yuhua Cheng</i>	
<b>VOLTAGE AND FUEL UTILIZATION CONTROL FOR SOLID OXIDE FUEL CELLS WITH COMBINED L1 ADAPTIVE – PREDICTIVE CONTROL STRATEGY .....</b>	<b>3104</b>
<i>Siwei Han ; Jiang Shen ; Lei Pan ; Li Sun</i>	
<b>A DROOP-BASED ENERGY MANAGEMENT STRATEGY FOR FUEL CELL ELECTRIC VEHICLES .....</b>	<b>3110</b>
<i>G. Zhang ; H. Xu ; L. Yang ; X. Zhang ; C. Xie ; K. Li ; C. Yin</i>	
<b>COMPARISON OF DOWN-REGULATION STRATEGIES FOR WIND FARM CONTROL AND THEIR EFFECTS ON FATIGUE LOADS .....</b>	<b>3116</b>
<i>Daan Van Der Hoek ; Stoyan Kanev ; Wouter Engels</i>	
<b>PARTITION-BASED UNSCENTED KALMAN FILTER FOR RECONFIGURABLE BATTERY PACK STATE ESTIMATION USING AN ELECTROCHEMICAL MODEL.....</b>	<b>3122</b>
<i>Luis D. Couto ; Michel Kinnaert</i>	
<b>PARTICLE FILTER DESIGN FOR EFFECTIVE WIND SPEED ESTIMATION OF WIND TURBINES.....</b>	<b>3129</b>
<i>S. M. Esmailifar ; Florian Pöschke ; Eckhard Gauterin ; Horst Schulte</i>	
<b>REAL-TIME TUBE MPC APPLIED TO A 10-STATE QUADROTOR MODEL .....</b>	<b>3135</b>
<i>Haimin Hu ; Xuhui Feng ; Rien Quirynen ; Mario Eduardo Villanueva ; Boris Houska</i>	
<b>USING NULL CONTROLLABLE REGIONS TO STABILIZE NONLINEAR SYSTEMS .....</b>	<b>3141</b>
<i>Tyler Homer ; Prashant Mhaskar</i>	
<b>LEBESGUE-APPROXIMATION-BASED MODEL PREDICTIVE CONTROL FOR NONLINEAR SAMPLED-DATA SYSTEMS WITH MEASUREMENT NOISES .....</b>	<b>3147</b>
<i>Lixing Yang ; Xiaofeng Wang</i>	
<b>COMBINED PREDICTIVE PATH FOLLOWING AND ADMITTANCE CONTROL.....</b>	<b>3153</b>
<i>Khalid J. Kazim ; Johanna Bethge ; Janine Matschek ; Rolf Findeisen</i>	
<b>MODEL PREDICTIVE TRAJECTORY SET CONTROL WITH ADAPTIVE INPUT DOMAIN DISCRETIZATION .....</b>	<b>3159</b>
<i>Artemi Makarow ; Martin Keller ; Christoph Rösmann ; Torsten Bertram</i>	
<b>NONLINEAR MODEL PREDICTIVE CONTROL REDUCTION USING TRUNCATED SINGLE SHOOTING .....</b>	<b>3165</b>
<i>Anson Maitland ; Mohit Batra ; John Mcphee</i>	
<b>JUMP LINEAR QUADRATIC CONTROL FOR ENERGY MANAGEMENT OF A NANOGRID .....</b>	<b>3171</b>
<i>Nathaniel Tucker ; Maryam Khanbaghi</i>	
<b>LINEAR PROGRAMMING TECHNIQUES AND NUMERICS IN STOCHASTIC OPTIMAL HARVESTING .....</b>	<b>3177</b>
<i>Martin G. Vieten ; Richard H. Stockbridge</i>	
<b>RAPID UNCERTAINTY PROPAGATION AND CHANCE-CONSTRAINED TRAJECTORY OPTIMIZATION FOR SMALL UNMANNED AERIAL VEHICLES.....</b>	<b>3183</b>
<i>Andrew W. Berning ; Ehsan Taheri ; Anouck Girard ; Ilya Kolmanovsky</i>	
<b>JITTER-ROBUST LQG CONTROL AND REAL-TIME SCHEDULING CO-DESIGN .....</b>	<b>3189</b>
<i>Yang Xu ; Anton Cervin ; Karl-Erik Årzén</i>	
<b>DYNAMIC SCHEDULING AND MAINTENANCE FOR A TWO-CLASS QUEUE WITH A DETERIORATING SERVER.....</b>	<b>3197</b>
<i>Jefferson Huang ; Douglas G. Down ; Mark E. Lewis ; Cheng-Hung Wu</i>	
<b>REACHABILITY-BASED DECISION MAKING FOR CITY DRIVING .....</b>	<b>3203</b>
<i>Heejin Ahn ; Karl Berntorp ; Stefano Di Cairano</i>	
<b>AIR-FUEL RATIO IMBALANCE DIAGNOSTIC OF SPARK-IGNITED ENGINES BASED ON TIME-VARYING HARMONIC SIGNAL ESTIMATION.....</b>	<b>3209</b>
<i>Yongsoon Yoon ; Avra Brahma</i>	
<b>GAME THEORETIC MODELING OF VEHICLE INTERACTIONS AT UNSIGNALIZED INTERSECTIONS AND APPLICATION TO AUTONOMOUS VEHICLE CONTROL .....</b>	<b>3215</b>
<i>Nan Li ; Ilya Kolmanovsky ; Anouck Girard ; Yildiray Yildiz</i>	
<b>ROBUST <math>H_\infty</math> STABILITY CONTROL FOR ALL-WHEEL INDEPENDENT STEER VEHICLE WITH THE CONSIDERATION OF TIME DELAYS.....</b>	<b>3221</b>
<i>Naisi Zhang ; Jibin Hu ; Jun Ni</i>	

<b>CONTROL DESIGN FOR A QUARTER CAR TEST RIG WITH PARALLEL ACTIVE LINK SUSPENSION</b> .....	3227
<i>Min Yu ; Simos A. Evangelou ; Daniele Dini</i>	
<b>INPUT-CONSTRAINED LPV OUTPUT FEEDBACK CONTROL FOR PATH FOLLOWING OF AUTONOMOUS GROUND VEHICLES</b> .....	3233
<i>Anh-Tu Nguyen ; Hui Zhang ; Chouki Sentouh ; Jean-Christophe Popieul</i>	
<b>LINEAR PARAMETER VARYING DESIGN FOR LATERAL CONTROL USING KINEMATICS OF VEHICLE MOTION</b> .....	3239
<i>Chang Mook Kang ; Seung-Hi Lee ; Chung Choo Chung</i>	
<b>LATERAL STABILITY CONTROL OF AUTONOMOUS GROUND VEHICLES CONSIDERING STABILITY MARGINS AND STATE ESTIMATION ERRORS</b> .....	3245
<i>Yiwen Huang ; Yan Chen</i>	
<b>EMBEDDED OPTIMIZATION ALGORITHMS FOR STEERING IN AUTONOMOUS VEHICLES BASED ON NONLINEAR MODEL PREDICTIVE CONTROL</b> .....	3251
<i>Rien Quirynen ; Karl Berntorp ; Stefano Di Cairano</i>	
<b>ENHANCEMENT OF STEERING FEEL OF ELECTRIC POWER ASSIST STEERING SYSTEM USING MODELING REFERENCE CONTROL</b> .....	3257
<i>Yijun Li ; Taehyun Shim ; Dexin Wang ; Timothy Offerle</i>	
<b>FAST PARAMETRIZATION OF VEHICLE SUSPENSION MODELS</b> .....	3263
<i>Florian Reiterer ; Hannes Gamper ; Sandra Thaller ; Patrick Schrangl ; Helmut Kokal ; Luigi Del Re</i>	
<b>A DESIGN APPROACH OF FRACTIONAL-ORDER PROPORTIONAL-PLUS-INTEGRAL CONTROLLER WITH EXPERIMENTAL VALIDATION FREE OF ANALYTICAL MODEL</b> .....	3269
<i>Yuanlong Xie ; Xiaoqi Tang ; Bao Song ; Xiangdong Zhou ; Jian Jin</i>	
<b>TIME-VARYING MODIFICATION OF REFERENCE MODEL FOR ADAPTIVE CONTROL WITH PERFORMANCE OPTIMIZATION</b> .....	3275
<i>Nhan T. Nguyen ; Kelley E. Hashemi</i>	
<b>ADAPTIVE OUTPUT FEEDBACK FOR AW-RASCLE-ZHANG TRAFFIC MODEL IN CONGESTED REGIME</b> .....	3281
<i>Huan Yu ; Miroslav Krstic</i>	
<b>MINIMUM-ORDER OBSERVER-BASED MULTIVARIABLE MRAC SYSTEMS</b> .....	3287
<i>Ge Song ; Gang Tao</i>	
<b>ONLINE IDENTIFICATION OF MUTUAL INDUCTANCE OF INDUCTION MOTOR WITHOUT MAGNETIZING CURVE</b> .....	3293
<i>Lu Liu ; Yafeng Guo ; Jun Wang</i>	
<b>ESTIMATION OF THE EDDY DIFFUSION COEFFICIENT USING TOTAL ELECTRON CONTENT DATA</b> .....	3298
<i>Ankit Goel ; Aaron Ridley ; Dennis S. Bernstein</i>	
<b>GRADIENT EXTREMUM SEEKING WITH TIME-VARYING DELAYS</b> .....	3304
<i>Tiago Roux Oliveira ; Damir Rušiti ; Mamadou Diagne ; Miroslav Krstic</i>	
<b>T-ACCESSIBILITY FOR A CLASS OF NONLINEAR TIME-DELAY SYSTEMS</b> .....	3310
<i>Claudia Califano ; Claude H. Moog</i>	
<b>CONTROL BARRIER FUNCTIONS FOR CONSTRAINED CONTROL OF LINEAR SYSTEMS WITH INPUT DELAY</b> .....	3316
<i>Mrdjan Jankovic</i>	
<b>A CONVEX REFORMULATION OF THE CONTROLLER SYNTHESIS PROBLEM FOR INFINITE-DIMENSIONAL SYSTEMS USING LINEAR OPERATOR INEQUALITIES (LOIS) WITH APPLICATION TO MIMO MULTI-DELAY SYSTEMS</b> .....	3322
<i>Matthew M. Peet</i>	
<b>REGIONAL STABILIZATION OF LINEAR DELAYED SCHRÖDINGER EQUATION BY CONSTRAINED BOUNDARY CONTROL</b> .....	3330
<i>Wen Kang ; Emilia Fridman</i>	
<b>INVERSE OPTIMALITY OF PREDICTOR FEEDBACKS FOR LINEARIZABLE STRICT-FEEDFORWARD SYSTEMS WITH INPUT DELAYS</b> .....	3336
<i>Cong Lin ; Dingchao Wang ; Xiushan Cai ; Xisheng Zhan ; Yanhong Liu</i>	
<b>MODELING OF PNEUMATIC ARTIFICIAL MUSCLE WITH KINETIC FRICTION AND SLIDING MODE CONTROL</b> .....	3342
<i>Jonathon E. Slightam ; Mark L. Nagurka</i>	
<b>ACCURATE POSITION TRACKING CONTROL OF A LUNG TUMOR MIMIC MODEL USING A LOW-COST PNEUMATIC ROBOT</b> .....	3348
<i>Alexander Wache ; Robert Prabel ; Harald Aschemann</i>	

<b>BROWNOUT<sup>CC</sup>: CASCADED CONTROL FOR BOUNDING THE RESPONSE TIMES OF CLOUD APPLICATIONS</b> .....	3354
<i>Tommi Nylander ; Cristian Klein ; Karl-Erik Årzén ; Martina Maggio</i>	
<b>PID POSITION CONTROL OF MCKIBBEN PNEUMATIC ARTIFICIAL MUSCLE USING ONLY PRESSURE FEEDBACK</b> .....	3362
<i>Koichiro Yokoyama ; Kiminao Kogiso</i>	
<b>SIMULTANEOUS DESIGN OF SMOOTH SWITCHING STATE-FEEDBACK LPV CONTROL</b> .....	3368
<i>Tianyi He ; Guoming G. Zhu ; Sean Shan-Min Swei ; Weihua Su</i>	
<b>ELIMINATING NONZERO INITIAL STATES IN FLEXIBLE SYSTEMS THROUGH SPECIFIED INSENSITIVITY INPUT SHAPING</b> .....	3374
<i>Daniel Newman ; Seong-Wook Hong ; Joshua Vaughan</i>	
<b>SEMI-GLOBAL STATE SYNCHRONIZATION FOR CONTINUOUS OR DISCRETE-TIME MULTI-AGENT SYSTEMS SUBJECT TO ACTUATOR SATURATION</b> .....	3380
<i>Meirong Zhang ; Ali Saberi ; Anton A. Stoorvogel</i>	
<b>PRIVACY IN FEEDBACK: THE DIFFERENTIALLY PRIVATE LQG</b> .....	3386
<i>Matthew Hale ; Austin Jones ; Kevin Leahy</i>	
<b>SECOND-ORDER CONSENSUS FOR MULTI-AGENT SYSTEMS BY STATE-DEPENDENT TOPOLOGY SWITCHING</b> .....	3392
<i>Yanbing Mao ; Ziang Zhang</i>	
<b>INFERRING THE NETWORK TOPOLOGY OF INTERCONNECTED NONLINEAR UNITS WITH DIFFUSIVE COUPLINGS</b> .....	3398
<i>Daniel A. Burbano-L ; Randy Freeman ; Kevin Lynch</i>	
<b>ANALYSIS AND CONTROL OF MULTI-LEVELLED OPINIONS SPREADING IN SOCIAL NETWORKS</b> .....	3404
<i>Vineeth S. Varma ; Irinel Constantin Morarescu ; Yezekael Haye</i>	
<b>MODELING AND MITIGATING THE COREMELT ATTACK</b> .....	3410
<i>Guosong Yang ; Hossein Hosseini ; Dinuka Sahabandu ; Andrew Clark ; João Hespanha ; Radha Poovendran</i>	
<b>OUTPUT FEEDBACK REINFORCEMENT LEARNING CONTROL FOR THE CONTINUOUS-TIME LINEAR QUADRATIC REGULATOR PROBLEM</b> .....	3417
<i>Syed Ali Asad Rizvi ; Zongli Lin</i>	
<b>OUTPUT FEEDBACK OPTIMAL TRACKING CONTROL USING REINFORCEMENT Q-LEARNING</b> .....	3423
<i>Syed Ali ; Asad Rizvi ; Zongli Lin</i>	
<b>BLACK-BOX MODELING AND OPTIMAL CONTROL OF A TWO-PHASE FLOW BY USING NAVIER-STOKES EQUATIONS AND LEVEL SET METHODS</b> .....	3429
<i>A. Alessandri ; P. Bagnnerini ; M. Gaggero ; L. Mantelli ; V. Santamaria ; A. Traverso</i>	
<b>ON THE OPTIMALITY OF LYAPUNOV-BASED FEEDBACK LAWS FOR CONSTRAINED DIFFERENCE INCLUSIONS</b> .....	3435
<i>Francesco Ferrante ; Ricardo G. Sanfelice</i>	
<b>OPTIMAL EVENT-TRIGGERED CONTROL OF NONLINEAR SYSTEMS: A MIN-MAX APPROACH</b> .....	3441
<i>Vignesh Narayanan ; Avimanyu Sahoo ; Sarangapani Jagannathan</i>	
<b>FUNCTION SPACE APPROACH FOR GRADIENT DESCENT IN OPTIMAL CONTROL</b> .....	3447
<i>Maurice Filo ; Bassam Bamieh</i>	
<b>ROBUST ATTITUDE TRACKING IN THE PRESENCE OF PARAMETER UNCERTAINTY FOR A VARIABLE-PITCH QUADROTOR</b> .....	3454
<i>Mahathi Bhargavapuri ; Soumya Ranjan Sahoo ; Mangal Kothari ; Abhishek</i>	
<b>AN ADAPTIVE CROSS APPROXIMATION-BASED METHOD FOR ROBUST NONLINEAR FEEDBACK CONTROL PROBLEMS</b> .....	3460
<i>Yan Li ; Zhong Wang</i>	
<b>STRUCTURAL LOAD MITIGATION CONTROL FOR NONLINEAR WIND TURBINES WITH UNMODELED DYNAMICS</b> .....	3466
<i>M. Hung Do ; Jackson G. Njiri ; Dirk Söffker</i>	
<b>FIXED-TIME ILF OBSERVER-CONTROL SCHEME FOR SPACECRAFT RENDEZVOUS</b> .....	3472
<i>Xiwen Tian ; Yingmin Jia</i>	
<b>DESIGNING PINNING NETWORK CONTROLLABILITY FOR INTERDEPENDENT DYNAMICAL NETWORKS</b> .....	3478
<i>Rasoul Rajaei ; Abdolmahdi Bagheri ; Amin Ramezani ; Sean P. Cornelius ; Jianxi Gao</i>	
<b>ROBUSTNESS OF BOUNDARY OBSERVERS FOR RADIAL DIFFUSION EQUATIONS TO PARAMETER UNCERTAINTY</b> .....	3484
<i>Leobardo Camacho-Solorio ; Scott Moura ; Miroslav Krstic</i>	

<b>OBSERVER DESIGN FOR SAMPLED-DATA SYSTEMS WITH UNKNOWN INPUTS AND UNCERTAINTIES BASED ON QUASI SLIDING MOTION</b> .....	3490
<i>Thang Nguyen ; Christopher Edwards ; Guido Herrmann</i>	
<b>SEA SURFACE FLOW ESTIMATION VIA ENSEMBLE-BASED VARIATIONAL DATA ASSIMILATION</b> .....	3496
<i>Shengze Cai ; Etienne Mémin ; Yin Yang ; Chao Xu</i>	
<b>A CONCURRENT LEARNING APPROACH TO MONOCULAR, VISION-BASED REGULATION OF LEADER/FOLLOWER SYSTEMS</b> .....	3502
<i>Luisa D. Fairfax ; Patricio A. Vela</i>	
<b>B-SPLINES IN JOINT PARAMETER AND STATE ESTIMATION IN LINEAR TIME-VARYING SYSTEMS</b> .....	3508
<i>Deepak Sridhar ; Debarshi Patanjali Ghoshal ; Hannah Michalska</i>	
<b>TRACKING DIFFERENTIATOR VIA TIME CRITERION</b> .....	3514
<i>Hehong Zhang ; Yunde Xie ; Gaoxi Xiao ; Chao Zhai ; Zhiqiang Long ; Huangwei Kang ; Junqing Tang</i>	
<b>VARIATIONAL APPROACH TO JOINT LINEAR MODEL AND STATE ESTIMATION</b> .....	3520
<i>Abhishek Pandey ; Debarshi Patanjali Ghoshal ; Hannah Michalska</i>	
<b>A HYBRID PREDICTIVE CONTROL APPROACH TO TRAJECTORY TRACKING FOR A FULLY ACTUATED BIPED</b> .....	3526
<i>Brendan E. Short ; Ricardo G. Sanfelice</i>	
<b>GROUND ROBOT TERRAIN MAPPING AND ENERGY PREDICTION IN ENVIRONMENTS WITH 3-D TOPOGRAPHY</b> .....	3532
<i>Michael Quann ; Lauro Ojeda ; William Smith ; Denise Rizzo ; Matthew Castanier ; Kira Barton</i>	
<b>REACTIVE INTEGRATED MISSION AND MOTION PLANNING FOR MOBILE ROBOTIC MANIPULATORS</b> .....	3538
<i>Alireza Partovi ; Rafael Rodrigues Da Silva ; Hai Lin</i>	
<b>SECURE CONTROL UNDER LINEAR TEMPORAL LOGIC CONSTRAINTS</b> .....	3544
<i>Luyao Niu ; Andrew Clark</i>	
<b>LEADER-FOLLOWER SIMULTANEOUS TRACKING-AGREEMENT FORMATION CONTROL OF NONHOLONOMIC VEHICLES</b> .....	3552
<i>Mohamed Maghenem ; Antonio Loría ; Elena Panteley</i>	
<b>MULTIPLE SOURCE SEEKING USING GLOWWORM SWARM OPTIMIZATION AND DISTRIBUTED GRADIENT ESTIMATION</b> .....	3558
<i>Avi Turgeman ; Herbert Werner</i>	
<b>DEEP LEARNING ASSISTED MACRONUTRIENT ESTIMATION FOR FEEDFORWARD-FEEDBACK CONTROL IN ARTIFICIAL PANCREAS SYSTEMS</b> .....	3564
<i>Ankush Chakrabarty ; Francis J. Doyle ; Eyal Dassau</i>	
<b>WEARABLE DEVICE BASED ACTIVITY RECOGNITION AND PREDICTION FOR IMPROVED FEEDFORWARD CONTROL</b> .....	3571
<i>Pranesh Navarathna ; B. Wayne Bequette ; Faye Cameron</i>	
<b>ZONE MODEL PREDICTIVE CONTROL WITH GLUCOSE- AND VELOCITY-DEPENDENT CONTROL PENALTY ADAPTATION FOR AN ARTIFICIAL PANCREAS</b> .....	3577
<i>Dawei Shi ; Eyal Dassau ; Francis J. Doyle</i>	
<b>INTEGRATING COMPARTMENT MODELS WITH RECURSIVE SYSTEM IDENTIFICATION</b> .....	3583
<i>Iman Hajizadeh ; Mudassir Rashid ; Ali Cinar</i>	
<b>PLASMA INSULIN COGNIZANT PREDICTIVE CONTROL FOR ARTIFICIAL PANCREAS</b> .....	3589
<i>Mudassir Rashid ; Iman Hajizadeh ; Ali Cinar</i>	
<b>THE IMPACT OF A RESPONSIVE ENDOGENOUS PANCREAS IN CRITICAL CARE GLUCOSE CONTROL</b> .....	3595
<i>Robert S. Parker ; Timothy D. Knab ; G. Clermont</i>	
<b>CODED CONTROL OVER LOSSY NETWORKS</b> .....	3602
<i>Ye Pu ; Jingge Zhu ; Karl H. Johansson ; Kannan Ramchandran ; Claire J. Tomlin</i>	
<b>GEOMETRIC TRAJECTORY TRACKING WITH ATTITUDE PLANNER FOR VECTORED-THRUST VTOL UAVS</b> .....	3609
<i>Davide Invernizzi ; Marco Lovera ; Luca Zaccarian</i>	
<b>LOCAL STABILIZATION OF T-S FUZZY DISCRETE-TIME SYSTEMS WITH TIME-VARYING DELAY IN THE STATES AND SATURATING ACTUATORS</b> .....	3615
<i>L. F. P. Silva ; V. J. S. Leite ; E. B. Castelan</i>	
<b>DIFFERENTIAL PASSIVITY LIKE PROPERTIES FOR A CLASS OF NONLINEAR SYSTEMS</b> .....	3621
<i>K. C. Kosaraju ; V. Chinde ; R. Pasumarthy ; A. Kelkar ; N. M. Singh</i>	
<b>CONTROL CONTRACTION METRICS ON FINSLER MANIFOLDS</b> .....	3626
<i>Thomas L. Chaffey ; Ian R. Manchester</i>	

<b>VALVE-BASED VIRTUAL ENERGY TANKS: A FRAMEWORK TO SIMULTANEOUSLY PASSIFY CONTROLS AND EMBED CONTROL OBJECTIVES .....</b>	<b>3634</b>
<i>Erfan Shahriari ; Lars Johannsmeier ; Sami Haddadin</i>	
<b>FINITE-TIME CONVERGENCE OF ACYCLIC GENERICALLY PERSISTENT FORMATIONS .....</b>	<b>3642</b>
<i>Viet Hoang Pham ; Minh Hoang Trinh ; Hyo-Sung Ahn</i>	
<b>POINTING CONSENSUS FOR ROOTED OUT-BRANCHING GRAPHS.....</b>	<b>3648</b>
<i>Minh Hoang Trinh ; Daniel Zelazo ; Quoc Van Tran ; Hyo-Sung Ahn</i>	
<b>H<math>\infty</math> OUTPUT CONTAINMENT CONTROL OF HETEROGENEOUS CONTINUOUS-TIME MULTI-AGENT SYSTEMS.....</b>	<b>3654</b>
<i>Chengzhi Yuan ; Shahab Ilbeigi ; Wei Zeng ; Tianrui Chen</i>	
<b>ROBUST DISTRIBUTED ADAPTIVE CONTAINMENT CONTROL OF HETEROGENEOUS LINEAR UNCERTAIN MULTI-AGENT SYSTEMS .....</b>	<b>3660</b>
<i>Chengzhi Yuan ; Haibo He ; Xiaonan Dong ; Shahab Ilbeigi</i>	
<b>FAST CONSENSUS AGAINST NOISE IN A LARGE-SCALE MULTI-AGENT SYSTEM WITH DISTRIBUTED PROPORTIONAL-RETARDED (PR) CONTROLLERS.....</b>	<b>3666</b>
<i>Adrián Ramírez ; Rifat Sipahi</i>	
<b>H<math>\infty</math> CONSENSUS CONTROL OF MULTI-AGENT SYSTEMS SUBJECT TO DIVERSE TIME-VARYING INPUT DELAYS VIA DYNAMIC OUTPUT FEEDBACK.....</b>	<b>3672</b>
<i>Chengzhi Yuan ; Fen Wu</i>	
<b>ON BOUNDARY OBSERVATION OF A SIMPLY SUPPORTED BEAM VIA A BACKSTEPPING DESIGN.....</b>	<b>3678</b>
<i>Dimitri Karagiannis ; Verica Radisavljevic-Gajic</i>	
<b>H8BASED DISTURBANCE OBSERVER DESIGN FOR NON-MINIMUM PHASE SYSTEMS WITH APPLICATION TO UAV ATTITUDE CONTROL .....</b>	<b>3683</b>
<i>Ximin Lyu ; Minghui Zheng ; Fu Zhang</i>	
<b>ROBUST CONTROL OF 2-DOF DIELECTRIC ELASTOMER ACTUATOR.....</b>	<b>3690</b>
<i>Zhihang Ye ; Zheng Chen</i>	
<b>TRUCK SUSPENSION CONTROL FOR PAVEMENT PROTECTION AT SIGNALIZED INTERSECTIONS .....</b>	<b>3696</b>
<i>Sijing Guo ; Qiuchi Xiong ; Jan Mou Li ; Liangyao Yu ; Lei Zuo</i>	
<b>VIBRATION SUPPRESSION CONTROL IN ROBOTIC PERCUSSIVE DRILLING .....</b>	<b>3702</b>
<i>Chaoke Guo ; Jingang Yi</i>	
<b>ROBUSTNESS OF JOIN-THE-SHORTEST-QUEUE SCHEDULING TO COMMUNICATION DELAY .....</b>	<b>3708</b>
<i>Saied Mahdian ; Zhengyuan Zhou ; Nicholas Bambos</i>	
<b>SWITCHING BETWEEN LIMIT CYCLES IN A MODEL OF RUNNING USING EXPONENTIALLY STABILIZING DISCRETE CONTROL LYAPUNOV FUNCTION.....</b>	<b>3714</b>
<i>Pranav A. Bhounsule ; Ali Zamani ; Jason Pusey</i>	
<b>TWO-TIME-SCALE CONTROL OF A LOW-ORDER NONLINEAR, NONSTANDARD SYSTEM WITH UNCERTAIN DYNAMICS .....</b>	<b>3720</b>
<i>Dipanjan Saha ; John Valasek ; Mohammad M. Reza</i>	
<b>PASSIVITY-BASED LEARNING CONTROL FOR TORQUE AND CADENCE TRACKING IN FUNCTIONAL ELECTRICAL STIMULATION (FES) INDUCED CYCLING.....</b>	<b>3726</b>
<i>Victor H. Duenas ; Christian A. Cousin ; Vahideh Ghanbari ; Warren E. Dixon</i>	
<b>ADMITTANCE TRAJECTORY TRACKING USING A CHALLENGE-BASED REHABILITATION ROBOT WITH FUNCTIONAL ELECTRICAL STIMULATION.....</b>	<b>3732</b>
<i>Christian A. Cousin ; Victor H. Duenas ; Courtney A. Rouse ; Warren E. Dixon</i>	
<b>THE BARYCENTRIC BERNSTEIN FORM FOR CONTROL DESIGN.....</b>	<b>3738</b>
<i>Tareq Hamadneh ; Rafael Wisniewski</i>	
<b>THERMAL-AWARE FLOW FIELD OPTIMIZATION FOR ENERGY SAVING OF DATA CENTERS .....</b>	<b>3744</b>
<i>Qi Wang ; Mengxuan Song ; Qiu Fang ; Jun Wang</i>	
<b>NUMERICAL SOLVER FOR INFINITE HORIZON LINEAR QUADRATIC REGULATOR PROBLEMS USING LAGUERRE FUNCTION AND RITZ METHOD.....</b>	<b>3750</b>
<i>Mohammadreza Radmanesh ; Manish Kumar ; Rajnikant Sharma ; Kelly Cohen ; Donald French</i>	
<b>OPTIMIZATION STRATEGIES FOR REAL-TIME CONTROL OF AN AUTONOMOUS MELTING PROBE .....</b>	<b>3756</b>
<i>Christian Meerpohl ; Kathrin Flaßkamp ; Christof Büskens</i>	
<b>FRACTIONAL ORDER GRADIENT METHODS FOR A GENERAL CLASS OF CONVEX FUNCTIONS.....</b>	<b>3763</b>
<i>Yuquan Chen ; Yiheng Wei ; Yong Wang ; Yangquan Chen</i>	

<b>DISTRIBUTED SMOOTH AND STRONGLY CONVEX OPTIMIZATION WITH INEXACT DUAL METHODS.....</b>	3768
<i>Mahyar Fazlyab ; Santiago Paternain ; Alejandro Ribeiro ; Victor M. Preciado</i>	
<b>MIXED SIMULTANEOUS PERTURBATION STOCHASTIC APPROXIMATION FOR GRADIENT-FREE OPTIMIZATION WITH NOISY MEASUREMENTS.....</b>	3774
<i>Long Wang ; Jingyi Zhu ; James C. Spall</i>	
<b>APPLICATION OF A MESSAGE-PASSING DECOMPOSITION OF SPARSELY-COUPLED LINEAR PROGRAMMING PROBLEMS TO THE UNIFORM STABILIZATION OF POSITIVE SWITCHED LINEAR SYSTEMS .....</b>	3780
<i>Ray Essick ; Geir Dullerud</i>	
<b>SPECULATIVE THREAD FRAMEWORK FOR TRANSIENT MANAGEMENT AND BUMPLESS TRANSFER IN RECONFIGURABLE DIGITAL FILTERS .....</b>	3786
<i>Michael Giardino ; Wayne Maxwell ; Bonnie Ferri ; Aldo Ferri</i>	
<b>PERIODICALLY SWITCHED COMMUNICATION TOPOLOGY IN MULTI-AGENT CONSENSUS CONTROL: STABILITY AND FLOQUET THEORY .....</b>	3792
<i>Mohammad Maadani ; Eric A. Butcher ; Tansel Yucelen</i>	
<b>MINIMUM DWELL TIMES FOR THE STABILITY OF SWITCHED SYSTEMS WITH MULTIPLE STABLE OPERATING POINTS.....</b>	3798
<i>William St. Pierre ; Jonathan W. Kimball</i>	
<b>OPTIMAL DYNAMIC CONTROL FOR INPUT-QUEUED SWITCHES IN HEAVY TRAFFIC.....</b>	3804
<i>Yingdong Lu ; Siva Theja Maguluri ; Mark S. Squillante ; Tonghoon Suk</i>	
<b>OBSERVERS FOR SWITCHING DISCRETE-TIME LINEAR SYSTEMS WITH UNKNOWN INPUTS AND UNKNOWN SWITCHING SEQUENCE .....</b>	3810
<i>L. Meyer ; D. Ichalal ; V. Vigneron</i>	
<b>A GENERAL APPROACH FOR FAULT IDENTIFICATION IN SOFC-BASED POWER GENERATION SYSTEMS .....</b>	3816
<i>Zehan Zhang ; Shuanghong Li ; Yupu Yang</i>	
<b>SPARSE AND DISTRIBUTED CONTROL OF WIDE-AREA POWER SYSTEMS WITH LARGE COMMUNICATION DELAYS .....</b>	3822
<i>Seyed Mehran Dibaji ; Anuradha Annaswamy ; Aranya Chakraborty ; Alefiya Hussain</i>	
<b>PARAMETER TUNING AND OPTIMAL DESIGN OF DECENTRALIZED STRUCTURED CONTROLLERS FOR POWER OSCILLATION DAMPING IN ELECTRICAL NETWORKS.....</b>	3828
<i>Amer Mešanovic ; Dominik Unseld ; Ulrich Münz ; Christian Ebenbauer ; Rolf Findeisen</i>	
<b>PARTICIPATION OF MICROGRIDS IN FREQUENCY REGULATION MARKETS.....</b>	3834
<i>Priyank Srivastava ; Chin-Yao Chang ; Jorge Cortés</i>	
<b>STOCHASTIC OPTIMAL POWER FLOW BASED ON DATA-DRIVEN DISTRIBUTIONALLY ROBUST OPTIMIZATION .....</b>	3840
<i>Yi Guo ; Kyri Baker ; Emiliano Dall'anese ; Zechun Hu ; Tyler Summers</i>	
<b>EMPIRICAL INVESTIGATION OF NON-CONVEXITIES IN OPTIMAL POWER FLOW PROBLEMS.....</b>	3847
<i>Mohammad Rasoul Narimani ; Daniel K. Molzahn ; Dan Wu ; Mariesa L. Crow</i>	
<b>FRACTIONAL EXTENDED AND UNSCENTED KALMAN FILTERING FOR STATE OF CHARGE ESTIMATION OF LITHIUM-ION BATTERIES .....</b>	3855
<i>Martin Kupper ; Christopher Funk ; Marius Eckert ; Sören Hohmann</i>	
<b>EXTENDED STATE OBSERVER FOR NUCLEAR REACTORS.....</b>	3863
<i>Zhe Dong ; Yifei Pan</i>	
<b>MARKET MECHANISMS FOR ENERGY STORAGE PLANNING AND OPERATION IN A POWER NETWORK.....</b>	3869
<i>Qisheng Huang ; Yunjian Xu ; Costas Courcoubetis</i>	
<b>SMOOTH SLIDING CONTROL APPLIED TO POWER OPTIMIZATION VIA EXTREMUM SEEKING IN VARIABLE SPEED WIND TURBINES.....</b>	3875
<i>Alessandro J. Peixoto ; Diego Pereira-Dias ; Gabriel F. Pacheco ; Carolina C. Neves</i>	
<b>PRICING ENERGY IN THE PRESENCE OF RENEWABLES.....</b>	3881
<i>Ashkan Zeinalzadeh ; Donya Ghavidel ; Vijay Gupta</i>	
<b>BATTERY-AWARE TIME/RANGE-EXTENDED LEADER-FOLLOWER TRACKING FOR A MULTI-AGENT SYSTEM.....</b>	3887
<i>Chuan Yan ; Huazhen Fang ; Haiyang Chao</i>	
<b>A DISSIPATIVITY FORMULATION FOR STABILITY ANALYSIS OF NONLINEAR AND PARAMETER DEPENDENT MPC .....</b>	3894
<i>Pablo S. G. Cisneros ; Herbert Werner</i>	

<b>LYAPUNOV-BASED ECONOMIC MODEL PREDICTIVE CONTROL OF STOCHASTIC NONLINEAR SYSTEMS .....</b>	<b>3900</b>
<i>Zhe Wu ; Junfeng Zhang ; Zhihao Zhang ; Fahad Albalawi ; Helen Durand ; Maaz Mahmood ; Prashant Mhaskar ; Panagiotis D. Christofides</i>	
<b>SPEED CONTROL OF A MARINE ENGINE USING PREDICTIVE FUNCTIONAL CONTROL BASED PID CONTROLLER.....</b>	<b>3908</b>
<i>Runzhi Wang ; Xuemin Li ; Qadeer Ahmed ; Yufei Liu ; Xiuzhen Ma</i>	
<b>NON-LINEAR MODEL PREDICTIVE ANTI-JERK CRUISE CONTROL FOR ELECTRIC VEHICLES WITH SLIP-BASED CONSTRAINTS.....</b>	<b>3915</b>
<i>Mohit Batra ; Anson Maitland ; John Mcphee ; Nasser L Azad</i>	
<b>A COMPARISON OF ECONOMIC AND TRACKING MODEL PREDICTIVE CONTROL IN A POST COMBUSTION CO<sub>2</sub> CAPTURE PROCESS.....</b>	<b>3921</b>
<i>Benjamin Decardi-Nelson ; Su Liu ; Jinfeng Liu</i>	
<b>LIFTED NEWTON-TYPE OPTIMIZATION FOR PSEUDOSPECTRAL METHODS IN NONLINEAR MODEL PREDICTIVE CONTROL .....</b>	<b>3927</b>
<i>Rien Quirynen ; Moritz Diehl</i>	
<b>STABILITY OF TRANSCENDENTAL FRACTIONAL SYSTEMS.....</b>	<b>3933</b>
<i>Bonan Zhou ; Jason L. Speyer</i>	
<b>OPTIMAL CONTROL OF GENE REGULATORY NETWORKS WITH UNKNOWN COST FUNCTION.....</b>	<b>3939</b>
<i>Mahdi Imani ; Ulisses Braga-Neto</i>	
<b>APPROXIMATE DYNAMIC PROGRAMMING FOR BUILDING CONTROL PROBLEMS WITH OCCUPANT INTERACTIONS .....</b>	<b>3945</b>
<i>Donghwan Lee ; Seungjae Lee ; Panagiota Karava ; Jianghai Hu</i>	
<b>A CONTROL VERSION OF THE FREIDLIN-WENTZELL THEOREM .....</b>	<b>3951</b>
<i>Pratik Worah</i>	
<b>CONVEX RELAXATIONS FOR NONLINEAR STOCHASTIC OPTIMAL CONTROL PROBLEMS.....</b>	<b>3955</b>
<i>Yuanxun Shao ; Dillard Robertson ; Joseph K. Scott</i>	
<b>THROUGHPUT MAXIMIZATION OF CAPACITATED RE-ENTRANT LINES THROUGH FLUID RELAXATION.....</b>	<b>3961</b>
<i>Michael Ibrahim ; Spyros Reveliotis</i>	
<b>TRANSFORMING VARIABLE TRANSPORT DELAYS INTO FIXED ONES: AN APPLICATION TO A CONVEYOR BELT PROBLEM.....</b>	<b>3969</b>
<i>Thomas Laurain ; Zsófia Lendek ; Jimmy Lauber ; Reinaldo M. Palhares</i>	
<b>ONLINE LEARNING OF AUTOMOTIVE GASOLINE ENGINE MODEL USING ROBUST RECURSIVE GAUSSIAN PROCESS .....</b>	<b>3975</b>
<i>Hiroyuki Oyama ; Masaki Yamakita</i>	
<b>GUARANTEEING CONSISTENCY IN A MOTION PLANNING AND CONTROL ARCHITECTURE USING A KINEMATIC BICYCLE MODEL.....</b>	<b>3981</b>
<i>Philip Polack ; Florent Alché ; Brigitte D'andrea-Novet ; Arnaud De La Fortelle</i>	
<b>A COMPARATIVE STUDY OF DATA-DRIVEN HUMAN DRIVER LATERAL CONTROL MODELS.....</b>	<b>3988</b>
<i>Kazuhide Okamoto ; Panagiotis Tsiotras</i>	
<b>FUEL-EFFICIENT MODEL PREDICTIVE CONTROL FOR HEAVY DUTY VEHICLE PLATOONING USING NEURAL NETWORKS.....</b>	<b>3994</b>
<i>Gustav Ling ; Klas Lindsten ; Oskar Ljungqvist ; Johan Löfberg ; Christoffer Norén ; Christian A. Larsson</i>	
<b>VEHICLE ENERGY MANAGEMENT WITH ECODRIVING: A SEQUENTIAL QUADRATIC PROGRAMMING APPROACH WITH DUAL DECOMPOSITION.....</b>	<b>4002</b>
<i>Z. Khalik ; G.P. Padilla ; T.C.J. Romijn ; M.C.F. Donkers</i>	
<b>MULTI-VEHICLE COORDINATION ON MERGING ROADS BASED ON PSEUDO-PERTURBATION-BASED BROADCAST CONTROL.....</b>	<b>4008</b>
<i>Yuji Ito ; Md Abdus Samad Kamal ; Takayoshi Yoshimura ; Shun-Ichi Azuma</i>	
<b>A COMPARISON OF TWO DISTRIBUTED V2V TRAJECTORY-PLANNING ALGORITHMS WITH CONSIDERATION OF DRIVERS' CHARACTERISTICS .....</b>	<b>4014</b>
<i>Kuoran Zhang ; Jinxiang Wang ; Nan Chen ; Guodong Yin</i>	
<b>PARETO OPTIMAL MULTI-ROBOT MOTION PLANNING.....</b>	<b>4020</b>
<i>Guoxiang Zhao ; Minghui Zhu</i>	
<b>MULTI-VEHICLE TARGET TRACKING AND FORMATION CONTROL IN NON-INERTIAL REFERENCE FRAMES.....</b>	<b>4026</b>
<i>Levi Devries ; Jeremy Dawkins</i>	

<b>OPTIMAL VISITING SCHEDULE SEARCH FOR PERSISTENT MONITORING OF A FINITE SET OF TARGETS .....</b>	<b>4032</b>
<i>Xi Yu ; Sean B. Andersson ; Nan Zhou ; Christos G. Cassandras</i>	
<b>SCHEDULING-DRIVEN MOTION COORDINATION OF AUTONOMOUS VEHICLES AT A MULTI-LANE TRAFFIC INTERSECTION .....</b>	<b>4038</b>
<i>Mehmet Ali Guney ; Ioannis A. Raptis</i>	
<b>ROBUST ADAPTIVE CONTROL FOR POSSIBLY NONMINIMUM-PHASE SYSTEMS WITH PERSISTENT ACTUATOR FAILURES .....</b>	<b>4044</b>
<i>Liyan Wen ; Gang Tao ; Hao Yang ; Fuyang Chen ; Chang Tan</i>	
<b>A NEW ROBUST ADAPTIVE CONTROL FOR UNCERTAIN NONLINEAR SYSTEMS .....</b>	<b>4050</b>
<i>Chao Han ; Zhen Liu ; Jianqiang Yi</i>	
<b>ROBUST ADAPTIVE CONTROL FOR CONSTRAINED DYNAMICAL SYSTEMS FOLLOWING UNRELIABLE REFERENCE SIGNALS .....</b>	<b>4056</b>
<i>Andrea L'afflitto</i>	
<b>ROBUST ADAPTIVE CONTROL FOR A CLASS OF NONLINEAR SYSTEMS BASED ON INTERVAL TYPE-2 FUZZY LOGIC SYSTEM AND SMALL GAIN APPROACH .....</b>	<b>4062</b>
<i>Xinlong Tao ; Jianqiang Yi ; Xiangmin Tan ; Zhen Liu ; Chao Han</i>	
<b>ADAPTIVE AUGMENTATION OF AN OPTIMAL BASELINE CONTROLLER FOR A HYPERSONIC VEHICLE .....</b>	<b>4068</b>
<i>Manfredo Martinino ; Joel Bordeneuve-Guibé ; Vincent Morio</i>	
<b>TRANSIENT PERFORMANCE BOUNDS FOR ADAPTIVE CONTROL .....</b>	<b>4075</b>
<i>Kiran S. Sajjanshetty ; Michael G. Safonov</i>	
<b>A NOVEL OPTIMAL SLIDING MODE CONTROL FOR MULTIPLE TIME-DELAY SYSTEMS .....</b>	<b>4081</b>
<i>Ahmadreza Argha ; Steven W. Su ; Andrey Savkin ; Branko G. Celler</i>	
<b>A DELAY INDEPENDENT OUTPUT FEEDBACK LAW FOR LINEAR SYSTEMS WITH TIME-VARYING INPUT DELAY .....</b>	<b>4087</b>
<i>Yusheng Wei ; Zongli Lin</i>	
<b>CONTROL OF LINEAR, TIME VARYING TRANSPORT SYSTEMS WITH SPATIALLY ACTING CONTROL INPUT .....</b>	<b>4093</b>
<i>Stefan Schaut ; Simon Alt ; Oliver Sawodny</i>	
<b>SLIDING MODE CONTROL FOR DISTURBANCE REJECTION IN SYSTEMS WITH MEASUREMENT DELAY USING PDE-BACKSTEPPING PREDICTOR .....</b>	<b>4099</b>
<i>Hardy L. C. P. Pinto ; Tiago Roux Oliveira ; Liu Hsu ; Miroslav Krstic</i>	
<b>OBSERVER-BASED FINITE TIME DISSIPATIVE CONTROL FOR NONLINEAR DISCRETE TIME-VARYING SYSTEM WITH TIME-VARYING DELAY .....</b>	<b>4105</b>
<i>Menghua Chen ; Jian Sun</i>	
<b>PASSIVITY BASED STATE SYNCHRONIZATION OF HOMOGENEOUS DISCRETE-TIME MULTI-AGENT SYSTEMS VIA STATIC PROTOCOL IN PRESENCE OF INPUT DELAY .....</b>	<b>4111</b>
<i>Zhenwei Liu ; Meirong Zhang ; Ali Saberi ; Anton A. Stoorvogel</i>	
<b>REINFORCEMENT LEARNING FOR ENERGY OPTIMIZATION UNDER HUMAN FATIGUE CONSTRAINTS OF POWER-ASSISTED WHEELCHAIRS .....</b>	<b>4117</b>
<i>Guoxi Feng ; Lucian Busoniu ; Thierry Marie Guerra ; Sami Mohammad</i>	
<b>OPTIMAL CITY NAVIGATION FOR PEDESTRIANS USING AGENT-SPECIFIC Q-LEARNING .....</b>	<b>4123</b>
<i>Lei Miao</i>	
<b>OPTIMAL CONTROL PROBLEMS WITH TERMINAL CONTROL CONSTRAINTS AND BENEFITS OF OVER-ACTUATION .....</b>	<b>4129</b>
<i>Mehdi Roozegar ; Jorge Angeles ; Hannah Michalska</i>	
<b>OPTIMAL CONTROL OF A SELF-PROPELLED PARTICLE IN A FLUID FLOW FIELD .....</b>	<b>4135</b>
<i>Singith Abeyisiriwardena ; Tuhin Das</i>	
<b>SLIDING MODE CONTROL AND OBSERVER-BASED DISTURBANCE COMPENSATION FOR A PERMANENT MAGNET LINEAR MOTOR .....</b>	<b>4141</b>
<i>Harald Aschemann ; Benedikt Haus ; Paolo Mercorelli</i>	
<b>DISTRIBUTED AGREEMENT ON ACTIVITY DRIVEN NETWORKS .....</b>	<b>4147</b>
<i>Masaki Ogura ; Junpei Tagawa ; Naoki Masuda</i>	
<b>AN EFFICIENT MODULE DETECTION ALGORITHM FOR LARGE-SCALE COMPLEX NETWORKS .....</b>	<b>4153</b>
<i>Chuangchuang Sun ; Ran Dai</i>	
<b>SIMULTANEOUS SENSOR AND ACTUATOR SELECTION/PLACEMENT THROUGH OUTPUT FEEDBACK CONTROL .....</b>	<b>4159</b>
<i>Sebastian Nugroho ; Ahmad F. Taha ; Tyler Summers ; Nikolaos Gatsis</i>	



<b>NETWORK RESOURCE MANAGEMENT FOR CLOUD BASED NETWORKED CONTROL SYSTEMS VIA ADAPTIVE SAMPLING .....</b>	<b>4165</b>
<i>Mohammad A. Rahman ; Liang Hong ; L.H. Keel</i>	
<b>ANALYSIS OF CONSENSUS NETWORKS DRIVEN BY SYMMETRIC- <math>\alpha</math> -STABLE MOTION .....</b>	<b>4171</b>
<i>Christoforos Somarakis ; Yaser Ghaedsharaf ; Nader Motee</i>	
<b>ON PERFORMANCE OF TIME-DELAY LINEAR CONSENSUS NETWORKS WITH DIRECTED INTERCONNECTION TOPOLOGIES.....</b>	<b>4177</b>
<i>Shima Dezfulian ; Yaser Ghaedsharaf ; Nader Motee</i>	
<b>PROBABILISTIC-ROBUST OPTIMAL CONTROL FOR UNCERTAIN LINEAR TIME-DELAY SYSTEMS BY STATE FEEDBACK CONTROLLERS WITH MEMORY.....</b>	<b>4183</b>
<i>Roya Karimi ; Arman Dabiri ; Jianqiang Cheng ; Eric A. Butcher</i>	
<b>A PREDICTION-CORRECTION METHOD FOR MODEL PREDICTIVE CONTROL .....</b>	<b>4189</b>
<i>Santiago Paternain ; Manfred Morari ; Alejandro Ribeiro</i>	
<b>STRUCTURALLY CONSTRAINED <math>l_1</math>-SPARSE CONTROL OF POWER SYSTEMS: ONLINE DESIGN AND RESILIENCY ANALYSIS.....</b>	<b>4195</b>
<i>Abhishek Jain ; Aranya Chakraborty ; Emrah Biyik</i>	
<b>INTEGRATION OF DIVIDE-AND-CONQUER ALGORITHM WITH FRACTIONAL ORDER CONTROLLERS FOR THE EFFICIENT DYNAMIC MODELING AND CONTROL OF MULTIBODY SYSTEMS.....</b>	<b>4201</b>
<i>Arman Dabiri ; Mohammad Poursina ; Eric A. Butcher</i>	
<b>INTERMITTENT FEEDBACK BASED REJECTION OF PERSISTENT BOUNDED DISTURBANCE .....</b>	<b>4207</b>
<i>Vishal Sawant ; Debraj Chakraborty ; Debasattam Pal</i>	
<b>SENSING-CONSTRAINED POWER CONTROL IN DIGITAL HEALTH.....</b>	<b>4213</b>
<i>Daniel Miller ; Zhengyuan Zhou ; Nicholas Bambos ; Irad Ben-Gal</i>	
<b>ROBUST POSITION CONTROL OF SERIES ELASTIC ACTUATOR WITH SLIDING MODE LIKE AND DISTURBANCE OBSERVER.....</b>	<b>4221</b>
<i>Wei Yin ; Lei Sun ; Meng Wang ; Jingtai Liu</i>	
<b>ROBUSTNESS OF NONLINEAR VIBRATIONAL CONTROL SYSTEMS BASED ON SAMPLING LYAPUNOV METHOD.....</b>	<b>4227</b>
<i>Xiaoxiao Cheng ; Ying Tan ; Iven Mareels</i>	
<b>ROBUST OPTIMAL ATTITUDE CONTROLLER DESIGN FOR TAIL-SITTERS.....</b>	<b>4233</b>
<i>Deyuan Liu ; Hao Liu ; Cunjia Liu ; Bing Zhu ; Zhaoying Li</i>	
<b>ROBUST D-STABILITY CRITERION FOR FRACTIONAL ORDER SYSTEMS WITH UNCERTAINTIES IN BOTH THE COEFFICIENTS AND ORDERS .....</b>	<b>4238</b>
<i>Reza Mohsenipour ; Mohsen Fathi Jegarkandi</i>	
<b>ROBUST H8 CONTROL OF SPACECRAFT RENDEZVOUS SYSTEM WITH INPUT SATURATION: A GAIN SCHEDULED APPROACH .....</b>	<b>4243</b>
<i>Yi Huang ; Yingmin Jia</i>	
<b>AN ITERATIVE ALGORITHM TO ESTIMATE INVARIANT SETS FOR UNCERTAIN SYSTEMS .....</b>	<b>4249</b>
<i>Peter Seiler</i>	
<b>IMPROVED PROGRESSIVE GAUSSIAN FILTERING USING LRKF PRIORS.....</b>	<b>4255</b>
<i>Gerhard Kurz ; Uwe D. Hanebeck</i>	
<b>ERROR ANALYSIS FOR THE LINEAR FEEDBACK PARTICLE FILTER.....</b>	<b>4261</b>
<i>Amirhossein Taghvaei ; Prashant G. Mehta</i>	
<b>DENSE 3-D MAPPING WITH SPATIAL CORRELATION VIA GAUSSIAN FILTERING.....</b>	<b>4267</b>
<i>Ke Sun ; Kelsey Saulnier ; Nikolay Atanasov ; George J. Pappas ; Vijay Kumar</i>	
<b>TRADEOFFS IN ANTI-ALIASING NOTCH FILTER DESIGN FOR MULTI-RATE DIGITAL SERVO SYSTEMS.....</b>	<b>4275</b>
<i>Saeid Bashash</i>	
<b>GRADIENT FLOWS IN FILTERING AND FISHER-RAO GEOMETRY .....</b>	<b>4281</b>
<i>Abhishek Halder ; Tryphon T. Georgiou</i>	
<b><math>H_\infty</math> FILTER DESIGN WITH LOW- AND MIDDLE-FREQUENCY SPECIFICATIONS FOR CONTINUOUS-TIME LINEAR SYSTEMS: LMI CONDITIONS DERIVED FROM TWO DIFFERENT EXTENSIONS OF THE KYP LEMMA.....</b>	<b>4287</b>
<i>Licio B. R. Romão ; Maurício C. De Oliveira ; Pedro L. D. Peres ; Ricardo C. L. F. Oliveira</i>	
<b>A MEAN FIELD GAME APPROACH TO SWARMING ROBOTS CONTROL .....</b>	<b>4293</b>
<i>Zhiyu Liu ; Bo Wu ; Hai Lin</i>	
<b>HYBRID FRAMEWORK FOR CONSENSUS IN FLEETS OF NON-HOLONOMIC ROBOTS .....</b>	<b>4299</b>
<i>T. Borzone ; I.-C. Morarescu ; M. Jungers ; M. Boc ; C. Janneteau</i>	

<b>GUARANTEED COLLISION AVOIDANCE BASED ON LINE-OF-SIGHT ANGLE AND TIME-TO-COLLISION .....</b>	<b>4305</b>
<i>Thiago Marinho ; Massinissa Amrouche ; Venanzio Cichella ; Dušan Stipanovic ; Naira Hovakimyan</i>	
<b>QUADROTOR MOTION CONTROL USING ADAPTIVE GENERALIZED DYNAMIC INVERSION .....</b>	<b>4311</b>
<i>Uzair Ansari ; Abdulrahman H. Bajodah</i>	
<b>ESTIMATING EXTERNAL DISTURBANCES IN UAVS USING LINEAR AND SPIN MOMENTA .....</b>	<b>4317</b>
<i>Julián Cayero ; Bernardo Morcego ; Josep Cugeró</i>	
<b>AUTONOMOUS POSITIONING OF A MOBILE ROBOT FOR WIRELESS CHARGING USING COMPUTER VISION AND MISALIGNMENT-SENSING COILS .....</b>	<b>4324</b>
<i>Ivan Cortes ; Won-Jong Kim</i>	
<b>DESIGN AND CONTROL OF A MULTI-ACTUATED HIGH-BANDWIDTH AND LARGE-RANGE SCANNER FOR ATOMIC FORCE MICROSCOPY .....</b>	<b>4330</b>
<i>F. Xia ; S. Truncala ; Y. Wang ; K. Youcef-Toumi</i>	
<b>DIRECT DESIGN OF CLOSED-LOOP DEMODULATORS FOR AMPLITUDE MODULATION ATOMIC FORCE MICROSCOPY .....</b>	<b>4336</b>
<i>Michael G. Ruppert ; David M. Harcombe ; Steven I. Moore ; Andrew J. Fleming</i>	
<b>ENHANCING FIXED-POINT CONTROL ROBUSTNESS FOR EXPERIMENTAL NON-CONTACT SCANS WITH THE TRANSVERSE-DYNAMIC FORCE MICROSCOPE .....</b>	<b>4342</b>
<i>K. Zhang ; T. Hatano ; G. Herrmann ; M. Antognozzi ; C. Edwards ; S.C. Burgess ; T. Nguyen ; M. Miles</i>	
<b>NONLINEAR AND ROBUST INTERNAL MODEL CONTROL OF A PIEZOELECTRIC ACTUATOR DEVOTED TO CHARACTERIZATION AT THE MICRO/NANOSCALE .....</b>	<b>4348</b>
<i>Micky Rakotondrabe ; Omar Aljanaideh ; Mohammad Aljanaideh</i>	
<b>MODELING OF A 2-DOF PIEZOELECTRIC MICROMANIPULATOR AT HIGH FREQUENCY RATES THROUGH NONLINEAR BLACK-BOX SYSTEM IDENTIFICATION .....</b>	<b>4354</b>
<i>Helon Vicente Hultmann Ayala ; Micky Rakotondrabe ; Leandro Dos Santos Coelho</i>	
<b>TWO-DEGREE-OF-FREEDOM CONTROL COMBINING MACHINE LEARNING AND EXTREMUM SEEKING FOR FAST SCANNING QUANTUM DOT MICROSCOPY .....</b>	<b>4360</b>
<i>Michael Maiworm ; Christian Wagner ; Ruslan Temirov ; F. Stefan Tautz ; Rolf Findeisen</i>	
<b>H<sub>2</sub> GAIN-SCHEDULED FILTERING FOR DISCRETE-TIME LPV SYSTEMS USING ESTIMATED TIME-VARYING PARAMETERS .....</b>	<b>4367</b>
<i>Jonathan M. Palma ; Cecília F. Moraes ; Ricardo C. L. F. Oliveira</i>	
<b>DYNAMIC COMPENSATORS FOR NONLINEAR SYSTEMS USING T-S FUZZY MODELS: A COMPARATIVE STUDY AND HIL IMPLEMENTATION .....</b>	<b>4373</b>
<i>Michael Klug ; Luis F. P. Silva</i>	
<b>FUZZY-MODEL-BASED DISTRIBUTED SAMPLED-DATA CONTROL AND ITS APPLICATION TO A DC MICROGRID .....</b>	<b>4379</b>
<i>Zhixiong Zhong ; Yanzheng Zhu</i>	
<b>COMPOSITIONAL VERIFICATION OF LARGE-SCALE NONLINEAR SYSTEMS VIA SUMS-OF-SQUARES OPTIMIZATION .....</b>	<b>4385</b>
<i>Shen Shen ; Russ Tedrake</i>	
<b>LMI-BASED TRAJECTORY TRACKING FOR A CLASS OF NONLINEAR SYSTEMS WITH APPLICATION TO AN ANAEROBIC DIGESTION PROCESS .....</b>	<b>4393</b>
<i>K. Chaib Draa ; H. Voos ; M. Alma ; A. Zemouche ; M. Darouach</i>	
<b>ROBUST H<sub>∞</sub> OBSERVER-BASED STABILIZATION OF LINEAR DISCRETE-TIME SYSTEMS WITH PARAMETER UNCERTAINTES .....</b>	<b>4398</b>
<i>C. Bennani ; F. Bedouhene ; A. Zemouche ; H. Bibi ; K. Chaib-Draa ; A. Aitouche ; R. Rajamani</i>	
<b>MULTI-ROBOT EXPLORATION AND COVERAGE: ENTROPY-BASED ADAPTIVE MAPS WITH ADJACENCY CONTROL LAWS .....</b>	<b>4403</b>
<i>Mitchell Scott ; Kshitij Jerath</i>	
<b>SELF-ORGANIZED CIRCLE FORMATION AROUND AN UNKNOWN TARGET BY A MULTI-ROBOT SWARM USING A LOCAL COMMUNICATION STRATEGY .....</b>	<b>4409</b>
<i>Aditya Milind Deshpande ; Rumi Kumar ; Mohammadreza Radmanesh ; Nalini Veerabhadrapa ; Manish Kumar ; Ali A. Minai</i>	
<b>A COUPLED BI-VIRUS SPREAD MODEL IN NETWORKED SYSTEMS .....</b>	<b>4414</b>
<i>Philip E. Paré ; Ji Liu ; Carolyn L. Beck ; Tamer Basar</i>	
<b>PASSIVITY BASED STATE SYNCHRONIZATION OF HOMOGENEOUS MULTI-AGENT SYSTEMS VIA STATIC PROTOCOL IN PRESENCE OF INPUT SATURATION .....</b>	<b>4420</b>
<i>Zhenwei Liu ; Ali Saberi ; Anton A. Stoorvogel ; Meirong Zhang</i>	
<b>ENERGY-AWARE PERSISTENT COVERAGE AND INTRUDER INTERCEPTION IN 3D DYNAMIC ENVIRONMENTS .....</b>	<b>4426</b>
<i>William Bentz ; Dimitra Panagou</i>	

<b>DISTRIBUTED SEEKING FOR GENERALIZED NASH EQUILIBRIA OF MONOTONE GAMES VIA PRECONDITIONED PROXIMAL ALGORITHMS .....</b>	<b>4434</b>
<i>Peng Yi ; Laca Pavel</i>	
<b>A TWO-STEP THRESHOLDING ALGORITHM FOR IMAGE-BASED DEFECT DETECTION IN ROLL-TO-ROLL COATING OF CELLULOSE NANOCRYSTAL FILMS.....</b>	<b>4440</b>
<i>Wei-Tai Chen ; Reaz A. Chowdhury ; Jeffrey Youngblood ; George T.-C. Chiu</i>	
<b>A QUADRATIC-OPTIMAL REPETITIVE PROCESS CONTROLLER FOR LASER METAL DEPOSITION .....</b>	<b>4446</b>
<i>Michelle L. Gegel ; Douglas A. Bristow ; Robert G. Landers</i>	
<b>MODELING AND CONTROL OF WEB LATERAL DYNAMICS IN ROLL-TO-ROLL MANUFACTURING: NEW GOVERNING EQUATIONS AND CONTROL STRATEGIES.....</b>	<b>4452</b>
<i>Edison O. Cobos Torres ; Prabhakar R. Pagilla</i>	
<b>ITERATIVE LEARNING CONTROL FOR PERIODIC DISTURBANCES IN TWIN-ROLL STRIP CASTING WITH MEASUREMENT DELAY .....</b>	<b>4458</b>
<i>Florian Browne ; George Chiu ; Neera Jain</i>	
<b>SYSTEM IDENTIFICATION OF A DISCRETE REPETITIVE PROCESS MODEL FOR ELECTROHYDRODYNAMIC JET PRINTING .....</b>	<b>4464</b>
<i>Zhi Wang ; Patrick M. Sammons ; Christopher P. Pannier ; Kira Barton ; David J. Hoelzle</i>	
<b>STATE AND OUTPUT FEEDBACK REGULATOR DESIGNS FOR DISTRIBUTED PARAMETER SYSTEMS .....</b>	<b>4472</b>
<i>Xiaodong Xu ; Stevan Dubljevic</i>	
<b>MULTI-TIME-SCALE BIOMOLECULAR ‘QUASI-INTEGRAL’ CONTROLLERS FOR SET-POINT REGULATION AND TRAJECTORY TRACKING .....</b>	<b>4478</b>
<i>Yili Qian ; Theodore W. Grunberg ; Domitilla Del Vecchio</i>	
<b>ADAPTIVE OPTIMAL OUTPUT REGULATION OF DISCRETE-TIME LINEAR SYSTEMS SUBJECT TO INPUT TIME-DELAY .....</b>	<b>4484</b>
<i>Weinan Gao ; Zhong-Ping Jiang</i>	
<b>PROGRAMMING OF SYSTEMS WITH HYSTERESIS USING PULSED INPUTS .....</b>	<b>4490</b>
<i>Jun Zhang ; David Torres ; Nelson Sepúlveda ; Xiaobo Tan</i>	
<b>ADAPTIVE OUTPUT REGULATION OF OUTPUT FEEDBACK SYSTEMS WITH UNKNOWN NONLINEAR EXOSYSTEMS AND UNKNOWN HIGH-FREQUENCY GAIN SIGN .....</b>	<b>4496</b>
<i>Jingyu Chen ; Zhengtao Ding</i>	
<b>SWITCHING-BASED SINUSOIDAL DISTURBANCE REJECTION FOR UNCERTAIN STABLE LINEAR SYSTEMS .....</b>	<b>4502</b>
<i>Yang Wang ; Gilberto Pin ; Andrea Serrani ; Thomas Parisini</i>	
<b>PREDICTION-CORRECTION DUAL ASCENT FOR TIME-VARYING CONVEX PROGRAMS.....</b>	<b>4508</b>
<i>Andrea Simonetto</i>	
<b>ADMM FOR MPC WITH STATE AND INPUT CONSTRAINTS, AND INPUT NONLINEARITY .....</b>	<b>4514</b>
<i>Sebastian East ; Mark Cannon</i>	
<b>SECOND LAW OF THERMODYNAMICS-BASED OPTIMIZATION OF SPARK-IGNITION ENGINE OPERATION .....</b>	<b>4520</b>
<i>Muataz Abotabik ; Richard T. Meyer ; Claudia Fajardo</i>	
<b>ON THE COMPUTATION OF WORST ATTACKS: A LP FRAMEWORK .....</b>	<b>4527</b>
<i>Nabil H. Hirzallah ; Petros G. Voulgaris</i>	
<b>ON THE STABILITY OF GRADIENT FLOW DYNAMICS FOR A RANK-ONE MATRIX APPROXIMATION PROBLEM .....</b>	<b>4533</b>
<i>Hesameddin Mohammadi ; Meisam Razaviyayn ; Mihailo R. Jovanovic</i>	
<b>SYSTEM ANALYSIS AND OPTIMIZATION OF HUMAN-ACTUATED DYNAMICAL SYSTEMS .....</b>	<b>4539</b>
<i>Sangjae Bae ; Sang Min Han ; Scott Moura</i>	
<b>REPETITIVE CONTROL OF DISCRETE-TIME MARKOV JUMP LINEAR SYSTEMS .....</b>	<b>4546</b>
<i>Guoqi Ma ; Xinghua Liu ; Prabhakar R. Pagilla</i>	
<b>UNIFORM ASYMPTOTIC STABILITY OF SWITCHED SYSTEMS VIA DETECTABILITY OF REDUCED CONTROL SYSTEMS .....</b>	<b>4552</b>
<i>José Luis Mancilla-Aguilar ; Rafael Antonio García</i>	
<b>CADENCE TRACKING FOR SWITCHED FES CYCLING COMBINED WITH VOLUNTARY PEDALING AND MOTOR RESISTANCE .....</b>	<b>4558</b>
<i>Courtney A. Rouse ; Christian A. Cousin ; Victor H. Duenas ; Warren E. Dixon</i>	
<b>QUADRATIC STABILITY MARGIN IN SWITCHED CONTROL SYSTEM DESIGN.....</b>	<b>4564</b>
<i>Jake D. Quenzer ; Bijan Barzgaran ; Kristi Morgansen ; Mehran Mesbahi</i>	
<b>CHARACTERIZATION FOR A RELAXED STATE-FEEDBACK STABILIZABILITY CONDITION IN SWITCHED LINEAR SYSTEMS VIA LAGRANGE DUALITY.....</b>	<b>4570</b>
<i>Federico Najson</i>	

<b>CONSENSUS UNDER SWITCHING SPANNING-TREE TOPOLOGIES AND PERSISTENTLY EXCITING INTERCONNECTIONS .....</b>	<b>4578</b>
<i>Nohemi Alvarez-Jarquin ; Antonio Loría ; José Luis Avila</i>	
<b>OPTIMAL POWER DEMAND MANAGEMENT BY AGGREGATORS USING MATCHING THEORY .....</b>	<b>4584</b>
<i>Hiroto Ikegami ; Toru Namerikawa</i>	
<b>A CONVEX CYCLE-BASED DEGRADATION MODEL FOR BATTERY ENERGY STORAGE PLANNING AND OPERATION .....</b>	<b>4590</b>
<i>Yuanyuan Shi ; Bolun Xu ; Yushi Tan ; Baosen Zhang</i>	
<b>ON THE RELATIONSHIP BETWEEN THE VCG MECHANISM AND MARKET CLEARING .....</b>	<b>4597</b>
<i>Takashi Tanaka ; Na Li ; Kenko Uchida</i>	
<b>AGGREGATING FLEXIBILITY OF HETEROGENEOUS ENERGY RESOURCES IN DISTRIBUTION NETWORKS .....</b>	<b>4604</b>
<i>Tianyi Chen ; Na Li ; Georgios B. Giannakis</i>	
<b>POWER CONTROL OF PERMANENT MAGNET SYNCHRONOUS GENERATOR-BASED WIND ENERGY CONVERSION SYSTEMS WITH HIGHER-ORDER SLIDING-MODE OBSERVER .....</b>	<b>4610</b>
<i>Steven Slaby ; Yuansheng Huang ; Xin Wang ; Bradley Noble</i>	
<b>A NOVEL COORDINATED CONTROL OF RENEWABLE ENERGY SOURCES AND ENERGY STORAGE SYSTEM IN ISLANDED MICROGRID .....</b>	<b>4616</b>
<i>Yonghao Gui ; Mingshen Li ; Josep M. Guerrero ; Juan C. Vasquez</i>	
<b>SUPERVISORY MODEL PREDICTIVE CONTROL OF FLEXIBLE BUILDING LOADS WITH ON-SITE SOLAR GENERATION .....</b>	<b>4622</b>
<i>James Allen ; Ari Halberstadt ; John Powers ; Nael H. El-Farra</i>	
<b>MODELING HUMAN-IN-THE-LOOP BEHAVIOR AND INTERACTIONS WITH HVAC SYSTEMS .....</b>	<b>4628</b>
<i>Michael B. Kane</i>	
<b>DATA-DRIVEN THERMAL MODEL INFERENCE WITH ARMAX, IN SMART ENVIRONMENTS, BASED ON NORMALIZED MUTUAL INFORMATION.....</b>	<b>4634</b>
<i>Zhanhong Jiang ; Jonathan Francis ; Anit Kumar Sahu ; Sirajum Munir ; Charles Shelton ; Anthony Rowe ; Mario Bergés</i>	
<b>PREDICTIVE MAINTENANCE FOR SUPERMARKET REFRIGERATION SYSTEMS USING ONLY CASE TEMPERATURE DATA .....</b>	<b>4640</b>
<i>Kedar Kulkarni ; Umamaheswari Devi ; Amith Sirighee ; Jagabondhu Hazra ; Praveen Rao</i>	
<b>HIERARCHICAL OPTIMIZATION FOR BUILDING ENERGY SYSTEMS .....</b>	<b>4646</b>
<i>Zhanhong Jiang ; Timothy Wilkie ; Soumik Sarkar</i>	
<b>SOFT IMPLEMENTATION OF CASCADED CONTROL ARCHITECTURES USING THE YOULA PARAMETERIZATION .....</b>	<b>4652</b>
<i>Christopher R. Price ; Bryan P. Rasmussen</i>	
<b>ROBUST DISTRIBUTED AND DECENTRALIZED CONTROL OF LARGE-SCALE NONLINEAR SYSTEMS WITH INPUT CONSTRAINTS BASED ON SOS OPTIMIZATION.....</b>	<b>4658</b>
<i>Dimitrios Pylorof ; Efstathios Bakolas</i>	
<b>SAFETY VERIFICATION USING BARRIER CERTIFICATES WITH APPLICATION TO DOUBLE INTEGRATOR WITH INPUT SATURATION AND ZERO-ORDER HOLD.....</b>	<b>4664</b>
<i>Azad Ghaffari ; Imoleayo Abel ; Daniel Ricketts ; Sorin Lerner ; Miroslav Krstic</i>	
<b>RECOVERING IN MINIMAL TIME FROM FEEDBACK LOSS: BOUNDED OVERSHOOTS .....</b>	<b>4670</b>
<i>Ho-Lim Choi ; Jacob Hammer</i>	
<b>AN ARCHITECTURE FOR ANALOG VLSI IMPLEMENTATION OF EMBEDDED MODEL PREDICTIVE CONTROL .....</b>	<b>4676</b>
<i>Terrence Skibik ; Ambrose A. Adegbege</i>	
<b>REFERENCE STATE TRAJECTORY GENERATION FOR OUTPUT TRACKING WITH CONSTRAINTS USING SEARCH TREES .....</b>	<b>4682</b>
<i>Jonathan Eden ; Ying Tan ; Darwin Lau ; Denny Oetomo</i>	
<b>BOUNDED INTEGRAL CONTROLLER FOR NONLINEAR MIMO SYSTEMS WITH INPUTS CONSTRAINT .....</b>	<b>4688</b>
<i>Yeqin Wang ; Beibei Ren ; Qing-Chang Zhong</i>	
<b>A FIXED-ARCHITECTURE FRAMEWORK FOR STOCHASTIC NONLINEAR CONTROLLER SYNTHESIS.....</b>	<b>4694</b>
<i>Ethan N. Evans ; Wassim M. Haddad ; Evangelos A. Theodorou</i>	
<b>APPROXIMATE CONVEX HULL BASED SAMPLE TRUNCATION FOR SCENARIO APPROACH TO CHANCE CONSTRAINED TRAJECTORY OPTIMIZATION.....</b>	<b>4700</b>
<i>Hossein Sartipizadeh ; Behçet Açikmese</i>	

<b>DECENTRALIZED CONTROL OF STOCHASTICALLY SWITCHED LINEAR SYSTEM WITH UNRELIABLE COMMUNICATION .....</b>	<b>4706</b>
<i>Seyed Mohammad Asghari ; Yi Ouyang ; Ashutosh Nayyar</i>	
<b>OPTIMAL STRATEGIES FOR DISJUNCTIVE SENSING AND CONTROL .....</b>	<b>4712</b>
<i>Richard L. Sutherland ; Ilya V. Kolmanovsky ; Anouck R. Girard ; Frederick A. Leve ; Christopher D. Petersen</i>	
<b>STOCHASTIC MPC USING THE UNSCENTED TRANSFORM .....</b>	<b>4718</b>
<i>Torben Knudsen ; John Leth</i>	
<b>FOAD: FAST OPTIMIZATION-BASED AUTONOMOUS DRIVING MOTION PLANNER.....</b>	<b>4725</b>
<i>Jianyu Chen ; Changliu Liu ; Masayoshi Tomizuka</i>	
<b>SIMULTANEOUS LATERAL STABILITY AND ENERGY EFFICIENCY CONTROL OF OVER-ACTUATED ELECTRIC VEHICLES.....</b>	<b>4733</b>
<i>Yan Ma ; Jian Chen ; Ying Peng ; Tong Wang</i>	
<b>AUTONOMOUS VEHICLE LATERAL MANEUVERING BY APPROXIMATE EXPLICIT PREDICTIVE CONTROL .....</b>	<b>4739</b>
<i>Woo Young Choi ; Dae Jung Kim ; Chang Mook Kang ; Seung-Hi Lee ; Chung Choo Chung</i>	
<b>OFFSET AND NOISE ESTIMATION OF AUTOMOTIVE-GRADE SENSORS USING ADAPTIVE PARTICLE FILTERING .....</b>	<b>4745</b>
<i>Karl Berntorp ; Stefano Di Cairano</i>	
<b>REAL-TIME TRAIL-BRAKING MANEUVER GENERATION FOR OFF-ROAD VEHICLE RACING .....</b>	<b>4751</b>
<i>Changxi You ; Panagiotis Tsiotras</i>	
<b>DISCRETE-TIME INTEGRAL SLIDING MODEL PREDICTIVE CONTROL FOR DYNAMIC LATERAL MOTION OF AUTONOMOUS DRIVING VEHICLES .....</b>	<b>4757</b>
<i>Dae Jung Kim ; Chang Mook Kang ; Seung-Hi Lee ; Chung Choo Chung</i>	
<b>ADDRESSING MANDATORY LANE CHANGE PROBLEM WITH GAME THEORETIC MODEL PREDICTIVE CONTROL AND FUZZY MARKOV CHAIN.....</b>	<b>4764</b>
<i>Qingyu Zhang ; Dimitar Filev ; H. E. Tseng ; Steve Szwabowski ; Reza Langari</i>	
<b>COLLISION IMMINENT STEERING USING NONLINEAR MODEL PREDICTIVE CONTROL .....</b>	<b>4772</b>
<i>John Wurts ; Jeffrey L. Stein ; Tulga Ersal</i>	
<b>IMPROVING EFFICIENCY OF AUTONOMOUS VEHICLES BY V2V COMMUNICATION.....</b>	<b>4778</b>
<i>Changliu Liu ; Chung-Wei Lin ; Shinichi Shiraiishi ; Masayoshi Tomizuka</i>	
<b>PERSONALIZED VEHICLE PATH FOLLOWING BASED ON ROBUST GAIN-SCHEDULING CONTROL IN LANE-CHANGING AND LEFT-TURNING MANEUVERS.....</b>	<b>4784</b>
<i>Yimin Chen ; Junmin Wang</i>	
<b>SAFETY VERIFICATION OF ADAS BY COLLISION-FREE BOUNDARY SEARCHING OF A PARAMETERIZED CATALOG.....</b>	<b>4790</b>
<i>Jinwei Zhou ; Luigi Del Re</i>	
<b>A VERSATILE APPROACH TO EVALUATING AND TESTING AUTOMATED VEHICLES BASED ON KERNEL METHODS.....</b>	<b>4796</b>
<i>Zhiyuan Huang ; Yaohui Guo ; Mansur Arief ; Henry Lam ; Ding Zhao</i>	
<b>A CLASS OF LOGISTIC FUNCTIONS FOR APPROXIMATING STATE-INCLUSIVE KOOPMAN OPERATORS .....</b>	<b>4803</b>
<i>Charles A. Johnson ; Enoch Yeung</i>	
<b>DECOMPOSITION OF NONLINEAR DYNAMICAL SYSTEMS USING KOOPMAN GRAMIANS.....</b>	<b>4811</b>
<i>Zhiyuan Liu ; Soumya Kundu ; Lijun Chen ; Enoch Yeung</i>	
<b>LEARNING CONSTITUTIVE EQUATIONS OF PHYSICAL COMPONENTS WITH CONSTRAINTS DISCOVERY.....</b>	<b>4819</b>
<i>Ion Matei ; Johan De Kleer ; Raj Minhas</i>	
<b>LEARNING STABLE NONLINEAR DYNAMICAL SYSTEMS WITH EXTERNAL INPUTS USING GAUSSIAN MIXTURE MODELS.....</b>	<b>4825</b>
<i>Harish Chaandar Ravichandar ; Iman Salehi ; Brian P. Baillie ; George M. Bollas ; Ashwin Dani</i>	
<b>A MULTIRATE REPETITIVE CONTROL FOR FRACTIONAL-ORDER SERVOS IN LASER-BASED ADDITIVE MANUFACTURING.....</b>	<b>4831</b>
<i>Dan Wang ; Xu Chen</i>	
<b>OPERATIONAL OPTIMIZATION OF SHALE GAS PROCESSING UNDER FEEDSTOCK UNCERTAINTIES WITH UPDATED BACK-OFF STRATEGY .....</b>	<b>4837</b>
<i>Na Luo ; Fengqi You</i>	
<b>A NOVEL AND EFFECTIVE PROCEDURE FOR AN UNDERGRADUATE FIRST CONTROL LABORATORY EDUCATION IN STATE SPACE-BASED MOTOR IDENTIFICATION.....</b>	<b>4843</b>
<i>Ahmad A. Masoud ; Mohammad Abu-Ali ; Ali Al-Shaikhi</i>	

<b>CONTINUUM DAMAGE MECHANICS APPLICATION IN LOW CYCLE FATIGUE DAMAGE ASSESSMENT FOR STEAM TURBINE .....</b>	<b>4849</b>
<i>Yongjian Sun ; Xiaohong Wang</i>	
<b>DYNAMICS, HOVER CONFIGURATIONS, AND ROTOR FAILURE RESTABILIZATION OF A MORPHING QUADROTOR .....</b>	<b>4855</b>
<i>Trevor Avant ; Unsik Lee ; Brian Katona ; Kristi Morgansen</i>	
<b>CHAOTIC TIME SERIES PREDICTION BASED ON IMPROVED MOPSO-ELM .....</b>	<b>4863</b>
<i>Meiling Xu ; Xin Li ; Min Han</i>	
<b>NONLINEAR ADAPTIVE ROBUST OPTIMIZATION MODEL AND ALGORITHM FOR RESILIENCE ANALYSIS AND ENHANCEMENT .....</b>	<b>4869</b>
<i>Jian Gong ; Fengqi You</i>	
<b>ECONOMIC BENEFIT ANALYSIS OF PROCESS CONTROL FOR PREDOMINANTLY TRANSIENT PROCESSES.....</b>	<b>4875</b>
<i>Joseph Costandy ; Thomas F. Edgar ; Michael Baldea</i>	
<b>TRAJECTORY TRACKING FOR AN INVERTED PENDULUM ON A CART: AN ACTIVE DISTURBANCE REJECTION CONTROL APPROACH.....</b>	<b>4881</b>
<i>M. Ramirez-Neria ; Z. Gao ; H. Sira-Ramirez ; R. Garrido-Moctezuma ; A. Luviano-Juarez</i>	
<b>PERFORMANCE OF SECOND-ORDER PLATOON OF VEHICLES IN PRESENCE OF TIME-DELAY AND NOISE .....</b>	<b>4887</b>
<i>Yaser Ghaedsharaf ; Christoforos Somarakis ; Nader Motee</i>	
<b>MODELING OF MULTI-DIMENSION LOAD BALANCING PROBLEM.....</b>	<b>4893</b>
<i>Haitham Elfaham ; Torben Deppe ; Ulrich Epple</i>	
<b>STEAM METHANE REFORMING FURNACE TEMPERATURE BALANCING USING BAYESIAN MODEL IDENTIFICATION.....</b>	<b>4899</b>
<i>Anh Tran ; Madeleine Pont ; Marquis Crose ; Panagiotis D. Christofides</i>	
<b>IMPROVING THE PART-LOAD PERFORMANCE OF TURBINES IN RANKINE CYCLE BASED AUTOMOTIVE WASTE HEAT RECOVERY SYSTEMS.....</b>	<b>4906</b>
<i>Michiel Oom ; Emanuel Feru ; Bram De Jager ; Henk Ouwerkerk ; Rick De Lange</i>	
<b>AWARENESS COVERAGE CONTROL WITH UNCERTAIN LOSS OF AWARENESS .....</b>	<b>4912</b>
<i>Teng-Hu Cheng ; Hao-Ping Wang ; Nasrettin Koksal</i>	
<b>CONTROLLABILITY OF NETWORKS WITH MULTIVARIABLE AGENTS .....</b>	<b>4918</b>
<i>Bo Ouyang ; Siddharth Pati ; Cong Wang ; Lu Lu</i>	
<b>A DISTRIBUTED REFERENCE GOVERNOR FOR HIGH-ORDER LTI SWARM SYSTEMS.....</b>	<b>4925</b>
<i>Tam Nguyen ; Satoshi Nakano ; Takeshi Hatanaka ; Emanuele Garone ; Masayuki Fujita</i>	
<b>ACCELERATED CONSENSUS WITH LINEAR RATE OF CONVERGENCE.....</b>	<b>4931</b>
<i>Jingjing Bu ; Maryam Fazel ; Mehran Mesbahi</i>	
<b>BAYESIAN GRAPHICAL GAMES FOR SYNCHRONIZATION IN DYNAMICAL SYSTEMS .....</b>	<b>4937</b>
<i>Victor G. Lopez ; Yan Wan ; Frank L. Lewis</i>	
<b>BIHARMONIC DISTANCE AND PERFORMANCE OF SECOND-ORDER CONSENSUS NETWORKS WITH STOCHASTIC DISTURBANCES.....</b>	<b>4943</b>
<i>Yuhao Yi ; Bingjia Yang ; Zhongzhi Zhang ; Stacy Patterson</i>	
<b>SMALL SATELLITE CONSTELLATION SEPARATION USING LINEAR PROGRAMMING BASED DIFFERENTIAL DRAG COMMANDS .....</b>	<b>4951</b>
<i>Emmanuel Sin ; Murat Arcak ; Andrew Packard</i>	
<b>DYNAMICALLY EMBEDDED MODEL PREDICTIVE CONTROL.....</b>	<b>4957</b>
<i>Marco M. Nicotra ; Dominic Liao-Mcpherson ; Ilya V. Kolmanovsky</i>	
<b>MEMORY-EFFICIENT FILTER BASED NOVEL POLICY ITERATION TECHNIQUE FOR ADAPTIVE LQR.....</b>	<b>4963</b>
<i>Sumit Kumar Jha ; Sayan Basu Roy ; Shubhendu Bhasin</i>	
<b>STATE OF CHARGE NODE PLANNING WITH SEGMENTED TRAFFIC INFORMATION .....</b>	<b>4969</b>
<i>Di Chen ; Youngki Kim ; Anna G. Stefanopoulou</i>	
<b>AUTOMATED ON-RAMP MERGING AND GAP DEVELOPMENT WITH SPEED CONSTRAINTS – A STATE-CONSTRAINED OPTIMAL CONTROL APPROACH .....</b>	<b>4975</b>
<i>Yue Zhou ; Michael E. Cholette ; Ashish Bhaskar ; Edward Chung</i>	
<b>HYBRID OPTIMAL CONTROL FOR TIME-EFFICIENT HIGHWAY TRAFFIC MANAGEMENT .....</b>	<b>4983</b>
<i>Yue Zu ; Chenhui Liu ; Ran Dai ; Anuj Sharma</i>	
<b>DESIGN OF BUILT-IN TESTS FOR ROBUST ACTIVE FAULT DETECTION AND ISOLATION OF DISCRETE FAULTS IN UNCERTAIN SYSTEMS.....</b>	<b>4989</b>
<i>William T. Hale ; Kyle A. Palmer ; Matthew D. Stuber ; George M. Bollas</i>	
<b>ACTIVE FAULT DIAGNOSIS WITH SENSOR SELECTION IN A DIESEL ENGINE AIR HANDLING SYSTEM.....</b>	<b>4995</b>
<i>Kyle A. Palmer ; William T. Hale ; George M. Bollas</i>	

<b>ACTIVE FAULT DETECTION OF BOOLEAN CONTROL NETWORKS</b> .....	5001
<i>Zhihua Zhang ; Thomas Leifeld ; Ping Zhang</i>	
<b>REDUCED MODEL BASED FAULT DETECTION AND ISOLATION WITH RESIDUAL THRESHOLD DETERMINATION</b> .....	5007
<i>Filipe Figueiredo ; Steven Liu</i>	
<b>DISTRIBUTED COOPERATIVE FAULT DETECTION FOR MULTI-AGENT SYSTEMS WITH TIME-VARYING DELAY</b> .....	5013
<i>Ming Luo ; Hao Fang ; Yan Li</i>	
<b>DISTRIBUTED FAULT DETECTION AND ACCOMMODATION IN DYNAMIC AVERAGE CONSENSUS</b> .....	5019
<i>Jemin George ; Matthew L. Elwin ; Randy A. Freeman ; Kevin M. Lynch</i>	
<b>STATE ESTIMATION OF A MUSCLE-DRIVEN LINKAGE</b> .....	5025
<i>Hanieh Mohammadi ; Dan Simon ; Hanz Richter</i>	
<b>AN INTEGRAL CHARACTERIZATION OF OPTIMAL ERROR COVARIANCE BY KALMAN FILTERING</b> .....	5031
<i>Song Fang ; Hideaki Ishii ; Jie Chen</i>	
<b>ADAPTIVE FADING KALMAN FILTER DESIGN USING THE GEOMETRIC MEAN OF NORMAL PROBABILITY DENSITIES</b> .....	5037
<i>Jakub Dokoupil ; Pavel Václavěk</i>	
<b>A LINEAR- AND LINEAR-MATRIX-INEQUALITY-CONSTRAINED EXTENDED KALMAN FILTER</b> .....	5043
<i>Robin Aucoin ; Stephen Alexander Chee ; James Richard Forbes</i>	
<b>ON THE COMPLEXITY AND APPROXIMABILITY OF OPTIMAL SENSOR SELECTION FOR KALMAN FILTERING</b> .....	5049
<i>Lintao Ye ; Sandip Roy ; Shreyas Sundaram</i>	
<b>RELATIVE POSE ESTIMATION USING RANGE-ONLY MEASUREMENTS WITH LARGE INITIAL UNCERTAINTY</b> .....	5055
<i>Anusna Chakraborty ; Kevin Brink ; Rajnikant Sharma ; Laith Sahawneh</i>	
<b>A VIRTUAL BUG PLANNING TECHNIQUE FOR 2D ROBOT PATH PLANNING</b> .....	5062
<i>Nishant Sharma ; Shivam Thukral ; Sandip Aine ; P.B. Sujit</i>	
<b>APPROXIMATING THE REGION OF MULTI-TASK COORDINATION VIA THE OPTIMAL LYAPUNOV-LIKE BARRIER FUNCTION</b> .....	5070
<i>Dongkun Han ; Lixing Huang ; Dimitra Panagou</i>	
<b>A NOVEL AUTONOMOUS TRAJECTORY CONTROL FOR VEHICULAR CYBER-PHYSICAL SYSTEMS WITH FLOCKING CONTROL ALGORITHMS</b> .....	5076
<i>Fengchen Wang ; Yan Chen</i>	
<b>DISTRIBUTED MODEL PREDICTIVE CONTROL FOR CONSTRAINED MULTI-AGENT SYSTEMS: A SWARM AGGREGATION APPROACH</b> .....	5082
<i>Giuseppe Franzè Luigi D'alfonso ; Giuseppe Fedele</i>	
<b>VISUAL MULTIPLE TARGET TRACKING FROM A DESCENDING AERIAL PLATFORM</b> .....	5088
<i>Parker C. Lusk ; Randal W. Beard</i>	
<b>OPTIMAL PATH PLANNING FOR SUAS TARGET OBSERVATION THROUGH CONSTRAINED URBAN ENVIRONMENTS USING SIMPLEX METHODS</b> .....	5094
<i>Michael D. Zollars ; Richard G. Cobb ; David J. Grymin</i>	
<b>DYNAMIC PROBE CALIBRATION FOR QUANTITATIVE MEASUREMENTS WITH ATOMIC FORCE MICROSCOPY</b> .....	5100
<i>Sergey Belikov ; John Alexander ; Sergei Magonov</i>	
<b>UNIFICATION OF AN EMPIRICAL AND A PHYSICALLY-BASED APPROACH TO CRYSTALLIZATION MONITORING</b> .....	5106
<i>Youngjo Kim ; Kayla C. Dean ; Yoshiaki Kawajiri ; Ronald W. Rousseau ; Martha A. Grover</i>	
<b>CONTROL-OBSERVER TECHNIQUE FOR SURFACE IMAGING WITH AN EXPERIMENTAL PLATFORM OF SCANNING-TUNNELING-MICROSCOPE TYPE</b> .....	5113
<i>Andrei Popescu ; Gildas Besançon ; Alina Voda ; Skandar Basrour</i>	
<b>COUNTERING SENSOR DRIFT IN X-RAY MICROSCOPY WITH FAST AND ROBUST OPTIMAL CONTROL</b> .....	5119
<i>Sheikh T. Mashrafi ; Curt Preissner ; Srinivasa M. Salapaka</i>	
<b>LEARNING AND ESTIMATION OF SINGLE MOLECULE BEHAVIOR</b> .....	5125
<i>Sivaraman Rajaganapathy ; James Melbourne ; Tanuj Aggarwal ; Rachit Shrivastava ; Murti V. Salapaka</i>	
<b>A MULTI-MODEL DESIGN FOR ROBUST HYBRID CONTROL OF NON-LINEAR PIEZOELECTRIC ACTUATORS AT THE MICRO/NANO SCALES</b> .....	5131
<i>Jonathan Cailliez ; Mokrane Boudaoud ; Shuai Liang ; Stéphane Régnier</i>	

<b>ON DEAD-ZONE OBSERVERS FOR LINEAR PLANTS</b> .....	5138
<i>M. Cocetti ; S. Tarbouriech ; L. Zaccarian</i>	
<b>ADAPTIVE OBSERVER DESIGN FOR LINEAR DESCRIPTOR SYSTEMS</b> .....	5144
<i>Marouane Alma ; Harouna Souley Ali ; Mohamed Darouach</i>	
<b>ROBUST ESTIMATION OF GRID VOLTAGE PARAMETERS VIA A SECOND-ORDER SLIDING MODE OBSERVER</b> .....	5150
<i>Zhen Tian ; Qing-Chang Zhong ; Zijun Lyu ; Jingqi Yuan</i>	
<b>CONTINUOUS-DISCRETE SEQUENTIAL OBSERVERS UNDER SAMPLING AND INPUT DELAYS</b> .....	5156
<i>Frederic Mazenc ; Michael Malisoff</i>	
<b>FORWARD-BACKWARD SET-MEMBERSHIP STATE ESTIMATOR BASED ON INTERVAL ANALYSIS</b> .....	5161
<i>Nacim Meslem ; Nacim Ramdani</i>	
<b>SIMULTANEOUS INPUT AND STATE SET-VALUED OBSERVERS WITH APPLICATIONS TO ATTACK-RESILIENT ESTIMATION</b> .....	5167
<i>Sze Zheng Yong</i>	
<b>NEURAL NETWORK BASED DISTRIBUTED CONSENSUS CONTROL FOR HETEROGENEOUS MULTI-AGENT SYSTEMS</b> .....	5175
<i>He Jiang ; Xiao-Kang Liu ; Haibo He ; Chengzhi Yuan ; Danil Prokhorov</i>	
<b>OPTIMAL STATIONARY SYNCHRONIZATION OF HETEROGENEOUS LINEAR MULTI-AGENT SYSTEMS</b> .....	5181
<i>Sebastian Bernhard ; Saman Khodaverdian ; Jürgen Adamy</i>	
<b>PRIVACY PRESERVING AVERAGE CONSENSUS WITH DIFFERENT PRIVACY GUARANTEE</b> .....	5189
<i>Xin Wang ; Jianping He ; Peng Cheng ; Jiming Chen</i>	
<b>COOPERATIVE OUTPUT REGULATION OF MULTI-AGENT SYSTEMS IN A SWITCHING NETWORK WITH INCOMPLETE EXOSYSTEM MEASUREMENT</b> .....	5195
<i>Himadri Basu ; Se Young Yoon</i>	
<b>FAST SEEKING OF NASH EQUILIBRIA WITHOUT STEADY-STATE OSCILLATION IN GAMES WITH NON-QUADRATIC PAYOFFS</b> .....	5201
<i>Zahra Zahedi ; Mohammad Mehdi Arefi ; Alireza Khayatian ; Hamidreza Modares</i>	
<b>PASSIVITY BASED DELAYED STATE SYNCHRONIZATION OF DISCRETE-TIME MULTI-AGENT SYSTEMS IN PRESENCE OF UNKNOWN COMMUNICATION DELAYS</b> .....	5207
<i>Zhenwei Liu ; Ali Saberi ; Anton A. Stoorvogel</i>	
<b>ACCOMMODATING TRIAL-VARYING TASKS IN ITERATIVE LEARNING CONTROL FOR LPV SYSTEMS, APPLIED TO PRINTER SHEET POSITIONING</b> .....	5213
<i>Robin De Rozario ; Remy Pelzer ; Sjikr Koekbakker ; Tom Oomen</i>	
<b>AN INSTRUMENTAL VARIABLE METHOD FOR CLOSED-LOOP IDENTIFICATION OF CORELESS LINEAR MOTORS</b> .....	5219
<i>Tuan T. Nguyen ; Mircea Lazar ; Hans Butler ; Paul M.J. Van Den Hof</i>	
<b>IDENTIFICATION OF PRECISION MOTION SYSTEMS WITH PRANDTL-ISHLINSKII HYSTERESIS NONLINEARITIES</b> .....	5225
<i>Khaled F. Aljanaideh ; Micky Rakotondrabe ; Mohammad Al Janaideh ; Deepa Kundur</i>	
<b>A COMPARISON OF <math>\Delta</math> COEFFICIENTS AND THE DPARAMETERIZATION, PART II: SIGNAL GROWTH</b> .....	5231
<i>Daniel Y. Abramovitch</i>	
<b>PRECISE EXTERNAL TORQUE ESTIMATION FOR TWO-INERTIA SYSTEM CONSIDERING MODELING ERRORS</b> .....	5238
<i>Shota Yamada ; Hiroshi Fujimoto</i>	
<b>QUANTITATIVE VISCOELASTICITY STUDIES WITH ATOMIC FORCE MICROSCOPY</b> .....	5244
<i>Sergey Belikov ; Marko Surtchev ; Ivan Malovichko ; Sergei Magonov</i>	
<b>ROBUST OBSERVER DESIGN OF ONE-SIDED LIPSCHITZ NONLINEAR SYSTEMS</b> .....	5250
<i>Badreddine El Hatak ; Hicham El Aiss ; Abdelaziz Hmamed ; Ahmed El Hajjaji</i>	
<b>VELOCITY AND PATH RECONSTRUCTION OF A MOVING OBJECT USING A MOVING CAMERA</b> .....	5256
<i>Zachary I. Bell ; Patryk Deptula ; Hsi-Yuan Chen ; Emily A. Doucette ; Warren E. Dixon</i>	
<b>VERSATILE VENTILATION AND AIR CONDITIONING OPERATION: GAUSSIAN PROCESS REGRESSION FOR TEMPERATURE FIELD PREDICTION</b> .....	5262
<i>Janine Guenther ; Oliver Sawodny</i>	
<b>LASSO REGULARIZATION PATHS FOR NARMAX MODELS VIA COORDINATE DESCENT</b> .....	5268
<i>Antônio H. Ribeiro ; Luis A. Aguirre</i>	



<b>ONLINE NONLINEAR SYSTEM IDENTIFICATION WITH EVOLVING SPATIAL-TEMPORAL FILTERS</b> .....	5274
<i>Zhaojian Li ; Dimitar Filev</i>	
<b>PARAMETER ESTIMATION FOR NONLINEARLY PARAMETERIZED GRAY-BOX MODELS</b> .....	5280
<i>Ankit Goel ; Dennis S. Bernstein</i>	
<b>A WITHIN-STRIDE SWITCHING CONTROLLER FOR WALKING WITH VIRTUAL CONSTRAINTS: APPLICATION TO A HYBRID NEUROPROSTHESIS</b> .....	5286
<i>Vahidreza Molazadeh ; Zhiyu Sheng ; Nitin Sharma</i>	
<b>ADAPTIVE AND RESILIENT REVENUE MAXIMIZING DYNAMIC RESOURCE ALLOCATION AND PRICING FOR CLOUD-ENABLED IOT SYSTEMS</b> .....	5292
<i>Muhammad Junaid Farooq ; Quanyan Zhu</i>	
<b>OPTIMAL DESIGN OF INERTER BASED VIBRATION ABSORBERS</b> .....	5298
<i>Oladapo Ogunbodede ; Tarunraj Singh</i>	
<b>RECEDING-HORIZON MULTI-OBJECTIVE OPTIMIZATION FOR DISASTER RESPONSE</b> .....	5304
<i>Kooktae Lee ; Sonia Martínez ; Jorge Cortés ; Robert H. Chen ; Mark B. Milan</i>	
<b>CONVERGENCE RATE OF DISTRIBUTED SUBGRADIENT METHODS UNDER COMMUNICATION DELAYS</b> .....	5310
<i>Thinh T. Doan ; Carolyn L. Beck ; R. Srikant</i>	
<b>A PRIMAL-DUAL LAPLACIAN GRADIENT FLOW DYNAMICS FOR DISTRIBUTED RESOURCE ALLOCATION PROBLEMS</b> .....	5316
<i>Dongsheng Ding ; Mihailo R. Jovanovic</i>	
<b>SLIDING MODE MULTIVARIABLE EXTREMUM SEEKING CONTROL WITH APPLICATION TO WIND FARM POWER OPTIMIZATION</b> .....	5321
<i>Yasser Bin Salamah ; Ümit Özgüncü</i>	
<b>ROBUST STABILIZATION OF LINEAR DIFFERENTIAL INCLUSION USING ADAPTIVE SLIDING MODE CONTROL</b> .....	5327
<i>Shamila Nateghi ; Y. Shtessel</i>	
<b>APPLICATION OF AN LPV BASED MODEL REFERENCE FTC SCHEME ON THE RECONFIGURE BENCHMARK MODEL</b> .....	5332
<i>H. Alwi ; L. Chen ; C. Edwards</i>	
<b>OCEANIC FEATURE BOUNDARY MAPPING WITH AN AUTONOMOUS UNDERWATER GLIDER</b> .....	5338
<i>Chiara Mellucci ; Prathyush P. Menon ; Christopher Edwards ; Peter Challenor</i>	
<b>SLIDING MODE CONTROL OF UNDERACTUATED VEHICLES IN THREE-DIMENSIONAL SPACE</b> .....	5344
<i>Karl Ludwig Fetzner ; Sergey Nersesov ; Hashem Ashrafiuon</i>	
<b>ROBUST OUTPUT TRACKING CONTROL FOR VAN DER POL OSCILLATOR: A SLIDING-MODE DIFFERENTIATOR APPROACH</b> .....	5350
<i>Hafiz Ahmed ; Héctor Rios ; Beshah Ayalew ; Yongqiang Wang</i>	
<b>DYNAMIC REAL-TIME OPTIMIZATION OF AIR CONDITIONING SYSTEMS IN RESIDENTIAL HOUSES UNDER DIFFERENT ELECTRICITY PRICING STRUCTURES</b> .....	5356
<i>Moataz N. Sheha ; Khalid Rashid ; Kody M. Powell</i>	
<b>PLUG-AND-PLAY VOLTAGE/CURRENT STABILIZATION DC MICROGRID CLUSTERS WITH GRID-FORMING/FEEDING CONVERTERS</b> .....	5362
<i>Renke Han ; Josep M. Guerrero ; Michele Tucci ; Andrea Martinelli ; Giancarlo Ferrari-Trecate</i>	
<b>OPTIMAL DYNAMIC PRICING FOR BINARY DEMANDS IN SMART GRIDS: A FAIR AND PRIVACY-PRESERVING STRATEGY</b> .....	5368
<i>Jalal Arabneydi ; Amir G. Aghdam</i>	
<b>A PASSIVITY-BASED APPROACH TO VOLTAGE STABILIZATION IN DC MICROGRIDS</b> .....	5374
<i>Raffaele Soloperto ; Pulkit Nahata ; Michele Tucci ; Giancarlo Ferrari-Trecate</i>	
<b>PERFORMANCE LIMITATIONS OF DISTRIBUTED INTEGRAL CONTROL IN POWER NETWORKS UNDER NOISY MEASUREMENTS</b> .....	5380
<i>Hendrik Flamme ; Emma Tegling ; Henrik Sandberg</i>	
<b>ENERGY MANAGEMENT IN A MULTI-BUILDING SET-UP VIA DISTRIBUTED STOCHASTIC OPTIMIZATION</b> .....	5387
<i>Vedad Causevic ; Alessandro Falsone ; Daniele Ioli ; Maria Prandini</i>	
<b>HIERARCHICAL MODEL PREDICTIVE CONTROL APPROACH FOR OPTIMAL DEMAND RESPONSE FOR SMALL/MEDIUM-SIZED COMMERCIAL BUILDINGS</b> .....	5393
<i>Donghun Kim ; James E. Braun</i>	
<b>IMPACT OF OCCUPANCY-BASED BUILDINGS-TO-GRID INTEGRATION ON FREQUENCY REGULATION IN SMART GRIDS</b> .....	5399
<i>Bing Dong ; Ahmad F. Taha ; Nikolaos Gatsis ; Zhaoxuan Li ; Ankur Pipri</i>	

<b>ECONOMIC MODEL-BASED CONTROL OF SUSTAINABLE BUILDINGS WITH PHOTOVOLTAIC (PV) AND BATTERY SYSTEMS CONSIDERING BATTERY DEGRADATION COSTS</b> .....	5406
<i>Jie Cai ; Xing Jin ; Hao Zhang</i>	
<b>FLEXIBILITY CHARACTERIZATION OF MULTI-ZONE BUILDINGS VIA DISTRIBUTED OPTIMIZATION</b> .....	5412
<i>Fu Lin ; Veronica Adetola</i>	
<b>ENABLING BETTER THERMAL MANAGEMENT OF INDOOR SPACES THROUGH ADAPTIVE ZONAL HEAT TRANSFER</b> .....	5418
<i>Zaid Bin Tariq ; Koushik Kar ; Sandipan Mishra ; John T. Wen</i>	
<b>SIMULATION-BASED POLICY GRADIENT AND ITS BUILDING CONTROL APPLICATION</b> .....	5424
<i>Donghwan Lee ; Seungjae Lee ; Panagiota Karava ; Jianghai Hu</i>	
<b>TIME- DOMAIN ADAPTIVE HARMONIC CONTROL FOR SINUSOIDAL DISTURBANCES REJECTION</b> .....	5430
<i>Mohammadreza Kamaldar ; Jesse B. Hoagg</i>	
<b>A SET-THEORETIC MODEL REFERENCE ADAPTIVE CONTROL ARCHITECTURE WITH PARTIALLY ADJUSTABLE STRICT PERFORMANCE GUARANTEES: A COMMAND GOVERNOR APPROACH</b> .....	5436
<i>Ehsan Arabi ; Tansel Yucelen ; Sivasubramanya Balakrishnan</i>	
<b>STABILITY CONDITIONS FOR ADAPTIVE CONTROL OF UNCERTAIN DYNAMICAL SYSTEMS WITH ACTUATOR AND UNMODELED DYNAMICS</b> .....	5442
<i>K. Merve Dogan ; Tansel Yucelen ; Benjamin C. Gruenwald ; Jonathan A. Muse</i>	
<b>DISCREPANCY DRIVEN ADAPTIVE MONTE CARLO FOR FORWARD UNCERTAINTY FORECASTING IN NONLINEAR DYNAMICAL SYSTEMS</b> .....	5448
<i>Chao Yang ; Mrinal Kumar</i>	
<b>RELIABLE NONLINEAR MODEL-PREDICTIVE CONTROL VIA VALIDATED SIMULATION</b> .....	5454
<i>Julien Alexandre Dit Sandretto</i>	
<b>CLOSED-LOOP STATISTICAL VERIFICATION OF STOCHASTIC NONLINEAR SYSTEMS SUBJECT TO PARAMETRIC UNCERTAINTIES</b> .....	5460
<i>John F. Quindlen ; Ufuk Topcu ; Girish Chowdhary ; Jonathan P. How</i>	
<b>STATISTICAL WATERMARKING FOR NETWORKED CONTROL SYSTEMS</b> .....	5467
<i>Pedro Hespanhol ; Matthew Porter ; Ram Vasudevan ; Anil Aswani</i>	
<b>ENERGY-BASED FEEDBACK CONTROL FOR STOCHASTIC DYNAMICAL SYSTEMS</b> .....	5473
<i>Wassim M. Haddad ; Tanmay Rajpurohit ; Xu Jin</i>	
<b>MODEL FITTING FILTER</b> .....	5479
<i>Xiaoxu Wang ; Jun Zhang ; Chaofeng Li ; Quan Pan ; Zhengtao Ding ; Xin Yin</i>	
<b>AT WHAT FREQUENCY SHOULD THE KELLY BETTOR BET?</b> .....	5485
<i>Chung-Han Hsieh ; B. Ross Barmish ; John A. Gubner</i>	
<b>ROBUST APPROXIMATION OF KOOPMAN OPERATOR AND PREDICTION IN RANDOM DYNAMICAL SYSTEMS</b> .....	5491
<i>Subhrajit Sinha ; Bowen Huang ; Umesh Vaidya</i>	
<b>SCENARIO-BASED MODEL PREDICTIVE CONTROL FOR ENERGY HARVESTING ACTUATORS</b> .....	5497
<i>Nicholas J. Watkins ; Konstantinos Gatsis ; Manfred Morari ; George J. Pappas</i>	
<b>CLOSING THE LOOP IN IOT-ENABLED MANUFACTURING SYSTEMS: CHALLENGES AND OPPORTUNITIES</b> .....	5503
<i>Kira Barton ; Francisco Maturana ; Dawn Tilbury</i>	
<b>EMISSION CONSTRAINED FUEL OPTIMAL VEHICLE CONTROL WITH ROUTE LOOKAHEAD</b> .....	5510
<i>Philipp Polteraer ; Luigi Del Re</i>	
<b>INTEGRATED AFS AND ARS CONTROL BASED ON ESTIMATED VEHICLE LATERAL STABILITY REGIONS</b> .....	5516
<i>Yiwen Huang ; Yan Chen</i>	
<b>MODEL-BASED ANALYSIS AND CONTROL OF SCR USING NOXSENSOR MEASUREMENTS</b> .....	5522
<i>Qinghua Lin ; Pinggen Chen</i>	
<b>A DYNAMIC PROGRAMMING-BASED REAL-TIME PREDICTIVE OPTIMAL GEAR SHIFT STRATEGY FOR CONVENTIONAL HEAVY-DUTY VEHICLES</b> .....	5528
<i>Chu Xu ; Abdullah Al-Mamun ; Stephen Geyer ; Hosam K. Fathy</i>	
<b>NON-UNIFORM COMBUSTION BASED MODE SWITCHING CONTROL FOR A PASSIVE SCR SYSTEM</b> .....	5536
<i>Qinghua Lin ; Pinggen Chen</i>	

<b>INTEGRATED FEEDBACK COMPENSATION CONTROL AND MODEL PREDICTIVE CONTROL WITH AFS FOR SECONDARY COLLISIONS MITIGATION AFTER AN INITIAL IMPACT</b> .....	5542
<i>Mingcong Cao ; Rongrong Wang ; Nan Chen</i>	
<b>ROBUST OPTIMAL ECO-DRIVING CONTROL WITH UNCERTAIN TRAFFIC SIGNAL TIMING</b> .....	5548
<i>Chao Sun ; Xinwei Shen ; Scott Moura</i>	
<b>COOPERATIVE ADAPTIVE CRUISE CONTROL: PDE MODELING AND STABILITY ANALYSIS*</b> .....	5554
<i>Zoleikha Abdollahi ; Roghieh A. Biron ; Pierluigi Pisu</i>	
<b>IDENTIFICATION OF THE ATTACKER IN CYBER-PHYSICAL SYSTEMS WITH AN APPLICATION TO VEHICULAR PLATOONING IN ADVERSARIAL ENVIRONMENT</b> .....	5560
<i>Soodeh Dadras ; Sara Dadras ; Chris Winstead</i>	
<b>REACHABLE SET ANALYSIS OF VEHICULAR PLATOONING IN ADVERSARIAL ENVIRONMENT</b> .....	5568
<i>Soodeh Dadras ; Sara Dadras ; Chris Winstead</i>	
<b>DATA-BASED FUEL-ECONOMY OPTIMIZATION OF CONNECTED AUTOMATED TRUCKS IN TRAFFIC</b> .....	5576
<i>Chaozhe R. He ; Jin I. Ge ; Gábor Orosz</i>	
<b>REPLAY ATTACK DETECTION IN A PLATOON OF CONNECTED VEHICLES WITH COOPERATIVE ADAPTIVE CRUISE CONTROL</b> .....	5582
<i>Roberto Merco ; Zoleikha Abdollahi Biron ; Pierluigi Pisu</i>	
<b>A DATA-DRIVEN ITERATIVE LEARNING CONTROL FRAMEWORK BASED ON CONTROLLER DYNAMIC LINEARIZATION</b> .....	5588
<i>Zhongsheng Hou ; Xian Yu ; Chenkun Yin</i>	
<b>ERROR CORRECTED REFERENCES AND ACCELERATION OF NORM OPTIMAL ITERATIVE LEARNING CONTROL</b> .....	5594
<i>David H Owens ; Bing Chu</i>	
<b>A SWITCHED ITERATIVE LEARNING CONTROL SCHEME FOR TWO-INPUT TWO-OUTPUT SYSTEMS</b> .....	5600
<i>He Li ; Douglas A. Bristow ; Robert G. Landers</i>	
<b>ITERATIVE LEARNING CONTROL OF A DISTRIBUTED HEATING SYSTEM DESCRIBED BY A NON-MINIMUM PHASE MODEL</b> .....	5606
<i>Slawomir Mandra ; Krzysztof Galkowski ; Eric Rogers ; Harald Aschemann ; Andreas Rauh</i>	
<b>ON FEEDBACK-BASED ITERATIVE LEARNING CONTROL FOR NONLINEAR SYSTEMS WITHOUT GLOBAL LIPSCHITZ CONTINUITY</b> .....	5612
<i>Gijo Sebastian ; Ying Tan ; Denny Oetomo ; Iven Mareels</i>	
<b>PASSIVITY-BASED ITERATIVE LEARNING CONTROL DESIGN FOR SELECTIVE LASER MELTING</b> .....	5618
<i>Michael J.B. Spector ; Yijie Guo ; Souvik Roy ; Max O. Bloomfield ; Antoinette Maniaty ; Sandipan Mishra</i>	
<b>HYBRID IDENTIFICATION OF L-N-L AND N-L-N SYSTEMS</b> .....	5626
<i>Grzegorz Mzyk</i>	
<b>INTEGRATED MODELING FOR BATTERY ELECTRIC VEHICLE TRANSCRITICAL THERMAL MANAGEMENT SYSTEM</b> .....	5632
<i>Sarah G. Garrow ; Christopher T. Aksland ; Sunny Sharma ; Andrew G. Alleyne</i>	
<b>SYSTEM IDENTIFICATION USING COMPOSITE FIR/IIR MODELS</b> .....	5639
<i>Khaled F. Aljanaideh ; Dennis S. Bernstein</i>	
<b>A SPIKING NEURAL DYNAMICAL DRIFT-DIFFUSION MODEL ON COLLECTIVE DECISION MAKING WITH SELF-ORGANIZED CRITICALITY</b> .....	5645
<i>Yanlin Zhou ; Chen Peng ; Qing Hui</i>	
<b>DUAL-QUATERNION BACKSTEPPING CONTROL FOR A FULLY-ACTUATED RIGID-BODY</b> .....	5653
<i>Tom Stian Andersen ; Tor-Aleksander Johansen ; Raymond Kristiansen</i>	
<b>DATA-DRIVEN APPROXIMATION OF TRANSFER OPERATORS: NATURALLY STRUCTURED DYNAMIC MODE DECOMPOSITION</b> .....	5659
<i>Bowen Huang ; Umesh Vaidya</i>	
<b>PERFORMANCE MANAGEMENT VIA MPC FOR WEB SERVICES IN CLOUD</b> .....	5665
<i>Durgesh Singh ; Joydeep Mukherjee ; Ps Saikrishna ; Ramkrishna Pasumarthy ; Diwakar Krishnamurthy</i>	
<b>CONTROL OF CRYOGENIC MEMORY STATE TRANSITIONS IN A JOSEPHSON JUNCTION ARRAY</b> .....	5671
<i>Roland Harvey ; Zhihua Qu</i>	

<b>MOTION CONTROL OF AN OVERHEAD CRANE USING A WIRELESS HOOK MOUNTED IMU</b> .....	5677
<i>Florentin Rauscher ; Samuel Nann ; Oliver Sawodny</i>	
<b>EVALUATION OF THE DISCRETE TIME FEEDBACK PARTICLE FILTER FOR IMU-DRIVEN SYSTEMS CONFIGURED ON SE(2)</b> .....	5683
<i>Marcus Greiff ; Karl Berntorp</i>	
<b>TUBE-BASED MODEL PREDICTIVE CONTROL FOR THE APPROACH MANEUVER OF A SPACECRAFT TO A FREE-TUMBLING TARGET SATELLITE</b> .....	5690
<i>Caroline Buckner ; Roberto Lampariello</i>	
<b>NONLINEAR POWER FLOW CONTROL DESIGN FOR NETWORKED AC/ DC BASED MICROGRID SYSTEMS</b> .....	5698
<i>David G. Wilson ; Wayne W. Weaver ; Rush D. Robinett ; Steve F. Glover</i>	
<b>SYNCHRONIZATION IN NETWORKS OF IDENTICAL LINEAR SYSTEMS WITH REDUCED INFORMATION</b> .....	5706
<i>Dhrubajit Chowdhury ; Hassan K. Khalil</i>	
<b>ON THE EFFECT OF SAMPLED-DATA HOLD AND DISCRETIZATION IN SIGNAL-TO-NOISE RATIO CONSTRAINED CONTROL</b> .....	5712
<i>Alejandro J. Rojas ; Hernan Haimovich ; Daniel Sbarbaro</i>	
<b><math>H_\infty</math> STATE-FEEDBACK GAIN-SCHEDULED CONTROL FOR MJLS WITH NON-HOMOGENEOUS MARKOV CHAINS*</b> .....	5718
<i>Jonathan M. Palma ; Cecília F. Morais ; Ricardo C. L. F. Oliveira</i>	
<b><math>H_2</math> AND <math>H_\infty</math> MODE-INDEPENDENT STATE-FEEDBACK CONTROL OF GENERALIZED BERNOULLI JUMP SYSTEMS WITH UNCERTAIN PROBABILITIES*</b> .....	5724
<i>Cecília F. Morais ; Jonathan M. Palma ; Pedro L. D. Peres ; Ricardo C. L. F. Oliveira</i>	
<b>SCHEDULING OF MEASUREMENT TRANSMISSION IN NETWORKED CONTROL SYSTEMS SUBJECT TO COMMUNICATION CONSTRAINTS</b> .....	5730
<i>Florian Rosenthal ; Benjamin Noack ; Uwe D. Hanebeck</i>	
<b>LINEAR QUADRATIC GAUSSIAN CONTROL UNDER FALSE DATA INJECTION ATTACKS</b> .....	5737
<i>Andrew Clark ; Luyao Niu</i>	
<b>GENERALIZED COLONEL BLOTTO GAME</b> .....	5744
<i>Aidin Ferdowsi ; Anibal Sanjab ; Walid Saad ; Tamer Basar</i>	
<b>ENERGY EFFICIENCY OF HYBRID-POWER HETNETS: A POPULATION-LIKE GAMES APPROACH</b> .....	5750
<i>L. A. Fletscher ; J. Barreiro-Gomez ; C. Ocampo-Martinez ; J. M. Maestre ; C. Valencia Peroni</i>	
<b>OPTIMAL UTILITY DESIGN IN CONVEX DISTRIBUTED WELFARE GAMES</b> .....	5756
<i>Emily Jensen ; Jason R. Marden</i>	
<b>DISTRIBUTED ROBUST POPULATION GAMES WITH APPLICATIONS TO OPTIMAL FREQUENCY CONTROL IN POWER SYSTEMS</b> .....	5762
<i>Julian Barreiro-Gomez ; Florian Dörfler ; Hamidou Tembine</i>	
<b>ASYMPTOTIC PROPERTIES OF A CHEAP CONTROL INFINITE HORIZON NASH DIFFERENTIAL GAME</b> .....	5768
<i>Valery Y. Glizer</i>	
<b>POISONING ATTACKS ON DATA-DRIVEN UTILITY LEARNING IN GAMES</b> .....	5774
<i>Ruoxi Jia ; Ioannis C. Konstantakopoulos ; Bo Li ; Costas Spanos</i>	
<b>FUZZY MODELING-BASED FAULT DIAGNOSIS AND FAULT TOLERANT CONTROL FOR THE NON-GAUSSIAN NONLINEAR SINGULAR STOCHASTIC DISTRIBUTION SYSTEM</b> .....	5781
<i>Lifan Li ; Chunhui Lei ; Lina Yao ; Jinglin Zhou ; Hong Wang</i>	
<b>FAULT DIAGNOSIS DESIGN FOR HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS</b> .....	5787
<i>Hadi Shahmazari ; Prashant Mhaskar ; John House ; Tim Salsbury</i>	
<b>CONFLICT-DRIVEN HYBRID OBSERVER-BASED ANOMALY DETECTION</b> .....	5793
<i>Zheng Wang ; Farshad Harirchi ; Dhananjay Anand ; Chee Yee Tang ; James Moyne ; Dawn Tilbury</i>	
<b>VIBRATION-BASED BEARING FAULT DIAGNOSIS USING REFLECTION COEFFICIENTS OF THE AUTOREGRESSIVE MODEL</b> .....	5801
<i>Mehrdad Heydarzadeh ; Mehrdad Nourani ; Vahid Azimi ; Amir R. Kashani-Pour</i>	
<b>SENSOR SELECTION FOR FAULT DETECTION AND ISOLATION IN STRUCTURALLY RECONFIGURABLE SYSTEMS</b> .....	5807
<i>Eeshan Deosthale ; Daniel Jung ; Qadeer Ahmed</i>	
<b>REACH SET-BASED ATTACK RESILIENT STATE ESTIMATION AGAINST OMNISCIENT ADVERSARIES</b> .....	5813
<i>Takumi Shinohara ; Toru Namerikawa</i>	

<b>IMAGE MOMENT-BASED OBJECT TRACKING AND SHAPE ESTIMATION FOR COMPLEX MOTIONS</b> .....	5819
<i>Gang Yao ; Kyle Hunte ; Ashwin Dani</i>	
<b>EXTENDING MOTION DETECTION TO TRACK STOPPED OBJECTS IN VISUAL MULTI-TARGET TRACKING</b> .....	5825
<i>Jacob H. White ; Karl T. Salva ; Randal W. Beard</i>	
<b>ATTITUDE ESTIMATION OF A HIGH-YAW-RATE MOBILE INVERTED PENDULUM; COMPARISON OF EXTENDED KALMAN FILTERING, COMPLEMENTARY FILTERING, AND MOTION CAPTURE</b> .....	5831
<i>Eric Sihite ; Thomas Bewley</i>	
<b>STRATEGIES TO DESIGN SIGNALS TO SPOOF KALMAN FILTER</b> .....	5837
<i>Zhongshun Zhang ; Lifeng Zhou ; Pratap Tokekar</i>	
<b>AN ADAPTIVE KALMAN FILTER FOR SPACECRAFT FORMATION NAVIGATION USING MAXIMUM LIKELIHOOD ESTIMATION WITH INTRINSIC SMOOTHING*</b> .....	5843
<i>Cory Fraser ; Steve Ulrich</i>	
<b>QUANTIFYING THE BIAS DYNAMICS IN A MODE-BASED KALMAN FILTER FOR STOCHASTIC HYBRID SYSTEMS</b> .....	5849
<i>Wenji Zhang ; Balasubramaniam Natarajan</i>	
<b>DISTRIBUTED ALGORITHM FOR ACHIEVING MINIMUM L1NORM SOLUTIONS OF LINEAR EQUATION</b> .....	5857
<i>Jingqiu Zhou ; Wang Xuan ; Shaoshuai Mou ; Brian. D.O. Anderson</i>	
<b>A DISTRIBUTED ALGORITHM FOR ACHIEVING THE CONSERVATION PRINCIPLE</b> .....	5863
<i>Xuan Wang ; Shaoshuai Mou</i>	
<b>ON STABILITY FOR STATE-LATTICE TRAJECTORY TRACKING CONTROL</b> .....	5868
<i>Oskar Ljungqvist ; Daniel Axehill ; Johan Löfberg</i>	
<b>A DATA-DRIVEN APPROACH FOR AUTONOMOUS MOTION PLANNING AND CONTROL IN OFF-ROAD DRIVING SCENARIOS</b> .....	5876
<i>Hossein Rastgoftar ; Bingxin Zhang ; Ella M. Atkins</i>	
<b>DUBINS OPTIMAL PATH THROUGH A SEQUENCE OF POINTS: A HIERARCHICAL TENSOR APPROXIMATION-BASED METHOD</b> .....	5884
<i>Zhong Wang ; Yan Li</i>	
<b>PRIVACY PRESERVATION IN A CONTINUOUS-TIME STATIC AVERAGE CONSENSUS ALGORITHM OVER DIRECTED GRAPHS</b> .....	5890
<i>Navid Rezazadeh ; Solmaz S. Kia</i>	
<b>DISTRIBUTIONALLY ROBUST PROCESS SCHEDULING UNDER AMBIGUOUS UNCERTAINTY</b> .....	5896
<i>Chao Shang ; Fengqi You</i>	
<b>A TWO-TIERED SHRINKING HORIZON FRAMEWORK FOR PARTICIPATION OF CHEMICAL PROCESSES IN SHORT-TERM ELECTRICITY MARKETS</b> .....	5902
<i>Joannah I. Otashu ; Michael Baldea</i>	
<b>A SWITCHING CONTROL LAW FOR NONLINEAR PROCESS WITH UNCERTAINTIES</b> .....	5908
<i>Yu Yang</i>	
<b>A VARIATIONAL BAYESIAN APPROACH TO MODELLING WITH RANDOM TIME-VARYING TIME DELAYS</b> .....	5914
<i>Yanjun Ma ; Seraphina Kwak ; Lei Fan ; Biao Huang</i>	
<b>CONTROL LYAPUNOV-BARRIER FUNCTION-BASED MODEL PREDICTIVE CONTROL OF NONLINEAR SYSTEMS</b> .....	5920
<i>Zhe Wu ; Fahad Albalawi ; Zhihao Zhang ; Junfeng Zhang ; Helen Durand ; Panagiotis D. Christofides</i>	
<b>MODEL PREDICTIVE CONTROL OF BATCH ENANTIOMER CRYSTALLIZATION USING TERNARY DIAGRAM INFORMATION</b> .....	5927
<i>Caio Felipe Curitiba Marcellos ; Helen Durand ; Joseph Sang-Ii Kwon ; Amaro Gomes Barreto ; Paulo Laranjeira Da Cunha Lage ; Mauricio Bezerra De Souza ; Argimiro Resende Secchi ; Panagiotis D. Christofides</i>	
<b>AN INTERVAL OBSERVER FOR DISCRETE-TIME SEIR EPIDEMIC MODELS</b> .....	5934
<i>Kwassi H. Degue ; Jerome Le Ny</i>	
<b>OBSERVER-BASED STABILIZATION OF STOCHASTIC HAMILTONIAN SYSTEMS</b> .....	5940
<i>Jian-Yong Li ; Yan-Hong Liu ; Shu-Xia Tang ; Xiu-Shan Cai</i>	
<b>DISTURBANCE OBSERVER BASED SPEED CONTROL OF A VARIABLE DISPLACEMENT PUMP-DRIVEN-MOTOR SYSTEM WITH IMPEDANCE TORQUE REGULATION</b> .....	5946
<i>Mingjie Li ; Jianhua Wei</i>	
<b>H<math>\infty</math> OBSERVER FOR DESCRIPTOR NONLINEAR SYSTEMS WITH NONLINEAR OUTPUT EQUATIONS</b> .....	5952
<i>G. Phanomchoeng ; A. Zemouche ; W. Jeons ; R. Rajamani ; F. Mazenc</i>	

<b>INTERVAL OBSERVER FOR BILINEAR SYSTEMS WITH UNKNOWN INPUTS</b> .....	5957
<i>L. Meyer ; D. Ichalal ; V. Vigneron</i>	
<b>INTERVAL OBSERVER FOR NONLINEAR LIPSCHITZ SYSTEMS WITH UNKNOWN INPUTS</b> .....	5962
<i>L. Meyer ; D. Ichalal ; V. Vigneron</i>	
<b>A COALITION FORMATION APPROACH TO COORDINATED TASK ALLOCATION IN HETEROGENEOUS UAV NETWORKS</b> .....	5968
<i>Fatemeh Afghah ; Mohammad Zaeri-Amirani ; Abolfazl Razi ; Jacob Chakareski ; Elizabeth Bentley</i>	
<b>A UNIFIED INPUT-OUTPUT APPROACH FOR NETWORKED CONTROL PROBLEMS WITH DECENTRALIZED AND SELFISH OPTIMALITY</b> .....	5976
<i>Petros G. Voulgaris ; Nicola Elia</i>	
<b>ON COMPUTING THE REAL DECENTRALIZED FIXED MODE RADIUS</b> .....	5982
<i>Alborz Alavian ; Michael Rotkowitz</i>	
<b>A CLASS OF EVENT-TRIGGERED COORDINATION ALGORITHMS FOR MULTI-AGENT SYSTEMS ON WEIGHT-BALANCED DIGRAPHS</b> .....	5988
<i>Ping Xu ; Cameron Nowzari ; Zhi Tian</i>	
<b>AUTOMATION OF ROAD INTERSECTIONS USING CONSENSUS-BASED AUCTION ALGORITHMS</b> .....	5994
<i>Fabio Molinari ; Jörg Raisch</i>	
<b>SCALE FREE BOUNDS ON THE AMPLIFICATION OF DISTURBANCES IN MASS CHAINS</b> .....	6002
<i>Richard Pates ; Kaoru Yamamoto</i>	
<b>RESONANCE-SHIFTING INTEGRAL RESONANT CONTROL FOR HIGH-SPEED NANOPositioning</b> .....	6006
<i>Sumeet S. Aphale ; Mohammad Namavar ; Andrew J. Fleming</i>	
<b>RESONANT-DYNAMICS LTV FEEDFORWARD FOR FLEXIBLE MOTION SYSTEMS</b> .....	6012
<i>Nikolaos Kontaras ; Marcel Heertjes ; Hans Zwart ; Maarten Steinbuch</i>	
<b>A NEW DYNAMIC IMAGING MODE FOR HIGH-RESOLUTION AND HIGH-BANDWIDTH ATOMIC FORCE MICROSCOPY</b> .....	6018
<i>Ram Sai Gorugantu ; Srinivasa M. Salapaka</i>	
<b>ADDING RIGID BODY MODES AND LOW PASS FILTERS TO THE BIQUAD STATE SPACE AND MULTINOTCH</b> .....	6024
<i>Daniel Y. Abramovitch</i>	
<b>ACHIEVING PERFECT CAUSAL FEEDFORWARD CONTROL IN PRESENCE OF NONMINIMUM-PHASE BEHAVIOR - EXPLOITING ADDITIONAL ACTUATORS AND SQUARING DOWN</b> .....	6031
<i>Jurgen Van Zundert ; Fons Luijten ; Tom Oomen</i>	
<b>HARDWARE DEMONSTRATION OF ATOMIC FORCE MICROSCOPY IMAGING VIA COMPRESSIVE SENSING AND <math>\mu</math>-PATH SCANS</b> .....	6037
<i>Roger A. Braker ; Yufan Luo ; Lucy Y. Pao ; Sean B. Andersson</i>	
<b>A HILL-MOYLAN LEMMA FOR EQUILIBRIUM-INDEPENDENT DISSIPATIVITY</b> .....	6043
<i>John W. Simpson-Porco</i>	
<b>FEEDBACK CONTROLLED BIFURCATION OF EVOLUTIONARY DYNAMICS WITH GENERALIZED FITNESS</b> .....	6049
<i>Biswadip Dey ; Alessio Franci ; Kayhan Özcimder ; Naomi Ehrlich Leonard</i>	
<b>A LOCAL SOLUTION TO THE OUTPUT REGULATION PROBLEM FOR SAMPLED-DATA SYSTEMS ON COMMUTATIVE MATRIX LIE GROUPS</b> .....	6055
<i>Philip James Mccarthy ; Christopher Nielsen</i>	
<b>FEEDBACK REGULARIZATION AND GEOMETRIC PID CONTROL FOR ROBUST STABILIZATION OF A PLANAR THREE-LINK HYBRID BIPEDAL WALKING MODEL</b> .....	6061
<i>W.M.L.T. Weerakoon ; T. W. U. Madhushani ; D.H.S. Maithripala ; J.M. Berg</i>	
<b>GEOMETRIC MOTION PLANNING FOR A THREE-LINK SWIMMER IN A THREE-DIMENSIONAL LOW REYNOLDS-NUMBER REGIME</b> .....	6067
<i>Jaskaran Grover ; Jake Zimmer ; Tony Dear ; Matthew Travers ; Howie Choset ; Scott David Kelly</i>	
<b>GRACEFUL TRANSITIONS BETWEEN LIMIT CYCLES OF A PARAMETERIZED SYSTEM</b> .....	6075
<i>Erik I. Verriest ; Vishal Murali</i>	
<b>A STUDY OF THE REDUCTION OF EXCESSIVE ENERGY GENERATED BY STRONG WINDS ON POWER LINES VIA A VELOCITY DAMPING CONTROLLER AT THE TRANSMISSION TOWER</b> .....	6081
<i>M. Najafi ; D. Fincher ; M.T. Beheshti</i>	
<b>CONTINUOUS TENSOR TRAIN-BASED DYNAMIC PROGRAMMING FOR HIGH-DIMENSIONAL ZERO-SUM DIFFERENTIAL GAMES</b> .....	6086
<i>Ezra Tal ; Alex Gorodetsky ; Sertac Karaman</i>	

<b>SOME IDEAS ON SAMPLING STRATEGIES FOR DATA-DRIVEN INFERENCE OF PASSIVITY PROPERTIES FOR MIMO SYSTEMS</b> .....	6094
<i>Anne Romer ; Jan Maximilian Montenbruck ; Frank Allgöwer</i>	
<b>ON THE COMPUTATION OF CONTROL INPUTS FOR LINEAR ENSEMBLES</b> .....	6101
<i>Shen Zeng ; Wei Zhang ; Jr-Shin Li</i>	
<b>BELIEF PROPAGATION MIN-SUM ALGORITHM FOR GENERALIZED MIN-COST NETWORK FLOW</b> .....	6108
<i>Andrii Riazanov ; Yury Maximov ; Michael Chertkov</i>	
<b>COMPUTING LARGEST TOLERABLE DISTURBANCE SETS</b> .....	6114
<i>Paul Varnell ; Fumin Zhang</i>	
<b>ACTIVE FAULT TOLERANT CONTROL OF MUPAL-A USING SLIDING MODES</b> .....	6120
<i>L. Chen ; H. Alwi ; C. Edwards ; M. Sato</i>	
<b>CLOSED-LOOP ASYMPTOTIC STABILITY FOR ANA-DIFFERENTIATOR BY MEANS OF A FRACTIONAL DYNAMIC CONTROL</b> .....	6126
<i>Iván Trejo-Zúñiga ; Sergio M. Delfín-Prieto ; Rafael Martínez-Guerra</i>	
<b>A SLIDING MODE-BASED APPROACH TO ENHANCE POWER QUALITY IN GRID CONNECTED WIND TURBINES</b> .....	6132
<i>Mohammad Javad Morshed ; Afef Fekih</i>	
<b>SPACECRAFT FORMATION FLYING USING SLIDING MODE CONTROL WITH NONSINGULAR TERMINAL SLIDING SURFACE</b> .....	6138
<i>Margaret Lawn ; Chau Ton ; Morgan Baldwin</i>	
<b>SLIDING MODE CONTROL WITH DISTURBANCE REJECTION FOR PIEZOELECTRIC NANOPositioning CONTROL</b> .....	6144
<i>Guangwei Wang ; Qingsong Xu</i>	
<b>A NEW CONTROLLER SWITCHING BETWEEN LINEAR AND TWISTING ALGORITHMS</b> .....	6150
<i>Elias Tahoumi ; Malek Ghanes ; Franck Plestan ; Jean-Pierre Barbot</i>	
<b>ROBUST CONTROL OF POWER NETWORKS UNDER WORST-CASE LOAD AND RENEWABLES UNCERTAINTY</b> .....	6156
<i>Sebastian Nugroho ; Mohammadhafez Bazrfashan ; Ahmad F. Taha ; Nikolaos Gatsis ; Junjian Qi</i>	
<b>A STRATEGY TO MAINTAIN SHORT-TERM STABILITY AND LONG-TERM PROFITABILITY OF RENEWABLE ENERGY AGGREGATION</b> .....	6162
<i>Pratyush Chakraborty ; Enrique Baeyens ; Kameshwar Poola ; Pramod P. Khargonekar</i>	
<b>DESIGNING REAL-TIME PRICES TO REDUCE LOAD VARIABILITY WITH HVAC</b> .....	6170
<i>John Audie Cabrera ; Yonatan Mintz ; Jhoanna Rhodette Pedrasa ; Anil Aswani</i>	
<b>BILATERAL CONTRACTS BETWEEN NGPPS AND RENEWABLE PLANTS CAN INCREASE PENETRATION OF RENEWABLES</b> .....	6176
<i>Nayara Aguiar ; Vijay Gupta ; Pramod P. Khargonekar ; Indraneel Chakraborty</i>	
<b>INTEGRATING ITERATIVE BIDDING IN ELECTRICITY MARKETS AND FREQUENCY REGULATION</b> .....	6182
<i>Tjerk Stegink ; Ashish Cherukuri ; Claudio De Persis ; Arjan Van Der Schaft ; Jorge Cortés</i>	
<b>DISTRIBUTED STOCHASTIC AC OPTIMAL POWER FLOW BASED ON POLYNOMIAL CHAOS EXPANSION</b> .....	6188
<i>Alexander Engelmann ; Tillmann Mühlfordt ; Yuning Jiang ; Boris Houska ; Timm Faulwasser</i>	
<b>A CHARACTERIZATION OF ALL RETROFIT CONTROLLERS</b> .....	6194
<i>Hampei Sasahara ; Takayuki Ishizaki ; Masaki Inoue ; Tomonori Sadamoto ; Jun-Ichi Irnura</i>	
<b>EFFICIENT OPTIMIZATION OF LARGE WIND FARMS FOR REAL-TIME CONTROL</b> .....	6200
<i>Jennifer Annoni ; Christopher Bay ; Timothy Taylor ; Lucy Pao ; Paul Fleming ; Kathryn Johnson</i>	
<b>DISTRIBUTED SYNTHESIS USING ACCELERATED ADMM</b> .....	6206
<i>Mohamadreza Ahmadi ; Murat Cubuktepe ; Ufuk Topcu ; Takashi Tanaka</i>	
<b>ASYMPTOTIC ROBUSTNESS IN CONSENSUS NETWORKS</b> .....	6212
<i>T. Sarkar ; M. Roozbehani ; M. A. Dahleh</i>	
<b>EXAMINING THE OBSERVABILITY OF EMERGENT BEHAVIOR AS A FUNCTION OF REDUCED MODEL ORDER</b> .....	6218
<i>Zhaohui Yang ; Kshitij Jerath</i>	
<b>ORDER REDUCTION OF INTERVAL SYSTEMS USING KHARITONOV'S THEOREM AND STABILITY EQUATION METHOD</b> .....	6224
<i>Sudharsana Rao Potturu ; Rajendra Prasad</i>	

<b>ROBUST CONTROL OF A FLEXIBLE DOUBLE GIMBAL MECHANISM</b> .....	6230
<i>Richard Shaffer : Mark Karpenko : Qi Gong</i>	
<b>TIGHT REACHABILITY BOUNDS FOR NONLINEAR SYSTEMS USING NONLINEAR AND UNCERTAIN SOLUTION INVARIANTS</b> .....	6236
<i>Kai Shen : Joseph Scott</i>	
<b>EFFICIENT REACHABILITY BOUNDS FOR DISCRETE-TIME NONLINEAR SYSTEMS BY EXTENDING THE CONTINUOUS-TIME THEORY OF DIFFERENTIAL INEQUALITIES</b> .....	6242
<i>Xuejiao Yang : Joseph Scott</i>	
<b>EVENT-TRIGGERED CONTROL FOR UNCERTAIN LINEAR SYSTEMS</b> .....	6248
<i>Qingtao Zhao : Jian Sun</i>	
<b>SPARSITY-CONSTRAINED MIXED <math>H_2/H_\infty</math> CONTROL</b> .....	6253
<i>Feier Lian : Aranya Chakraborty : Fen Wu : Alexandra Duel-Hallen</i>	
<b>ACTIVE SAMPLING FOR CLOSED-LOOP STATISTICAL VERIFICATION OF UNCERTAIN NONLINEAR SYSTEMS</b> .....	6259
<i>John Quindlen : Ufuk Topcu : Girish Chowdhary : Jonathan P. How</i>	
<b>ASYMPTOTIC PERFORMANCE OF ENERGY-AWARE MULTISERVER QUEUEING SYSTEMS WITH SETUP TIMES</b> .....	6266
<i>Vincent Maccio : Douglas G. Down</i>	
<b>DISCOUNT-BASED PRICING AND CAPACITY PLANNING FOR EV CHARGING UNDER STOCHASTIC DEMAND</b> .....	6273
<i>Parthe Pandit : Samuel Coogan</i>	
<b>ON THE PROBLEM OF STOCHASTIC DECISIONS WITH BACKWARD STOCHASTIC VIABILITY PROPERTY</b> .....	6279
<i>Getachew K. Befekadu</i>	
<b>SAFETY-AWARE OPTIMAL CONTROL OF STOCHASTIC SYSTEMS USING CONDITIONAL VALUE-AT-RISK</b> .....	6285
<i>Samantha Samuelson : Insoon Yang</i>	
<b>ON ABRUPTLY-CHANGING AND SLOWLY-VARYING MULTIARMED BANDIT PROBLEMS</b> .....	6291
<i>Lai Wei : Vaibhav Srivastava</i>	
<b>REAL TIME LEVEL LANE DECISION ALGORITHM BASED ON AUTONOMOUS VEHICLE SENSORS DATA</b> .....	6297
<i>Jennie Lioris : Annie Bracquemond : Gildas Thiolon : laurent Bonic</i>	
<b>MULTI-OBJECTIVE OPTIMIZATION FOR ENERGY MANAGEMENT OF FUEL CELL HYBRID ELECTRIC VEHICLES</b> .....	6303
<i>Hao Liu : Jian Chen : Chengshuai Wu : Hao Chen</i>	
<b>EKF FOR SIMULTANEOUS VEHICLE MOTION ESTIMATION AND IMU BIAS CALIBRATION WITH OBSERVABILITY-BASED ADAPTATION</b> .....	6309
<i>Vicent Rodrigo Marco : Jens Christian Kalkkuhl : Joerg Raisch</i>	
<b>NONLINEAR OBSERVER FOR VEHICLE MOTION TRACKING</b> .....	6317
<i>Woongsun Jeon : Ali Zemouche : Rajesh Rajamani</i>	
<b>A SWITCHED ADAPTIVE OBSERVER FOR EXTENDED BRAKING STIFFNESS ESTIMATION</b> .....	6323
<i>Missie Aguado-Rojas : William Pasillas-Lepine : Antonio Loria</i>	
<b>A NONLINEAR MODEL-PREDICTIVE CONTROL SCHEME FOR A HEAVY DUTY TRUCK'S WASTE HEAT RECOVERY SYSTEM FEATURING MOVING HORIZON ESTIMATION</b> .....	6329
<i>Enrique Eduardo Guerrero Merino : Johannes Schloeder : Christian Kirches</i>	
<b>A DISCRETE EVENT TRAFFIC MODEL EXPLAINING THE TRAFFIC PHASES OF THE TRAIN DYNAMICS ON A LINEAR METRO LINE WITH DEMAND-DEPENDENT CONTROL</b> .....	6335
<i>Florian Schanzenbacher : Nadir Farhi : Fabien Leurent : Gerard Gabriel</i>	
<b>MULTI-INTERSECTION TRAFFIC MANAGEMENT FOR AUTONOMOUS VEHICLES VIA DISTRIBUTED MIXED INTEGER LINEAR PROGRAMMING</b> .....	6341
<i>Faraz Ashtiani : S. AliReza Fayazi : Ardalan Vahidi</i>	
<b>RELIABLE INTERSECTION CONTROL IN NON-COOPERATIVE ENVIRONMENTS</b> .....	6347
<i>Muhammed Omer Sayin : Chung-Wei Lin : Shinichi Shiraishi : Tamer Basar</i>	
<b>A SUBMODULAR APPROACH FOR OPTIMAL SENSOR PLACEMENT IN TRAFFIC NETWORKS</b> .....	6353
<i>Negar Mehr : Roberto Horowitz</i>	
<b>THE PRICE OF ANARCHY FOR TRANSPORTATION NETWORKS WITH MIXED AUTONOMY</b> .....	6359
<i>Daniel Lazar : Samuel Coogan : Ramtin Pedarsani</i>	
<b>OFFSET SELECTION FOR BANDWIDTH MAXIMIZATION ON MULTIPLE ROUTES</b> .....	6366
<i>Negar Mehr : Marc Bernard Sanselme : Nitzan Orr : Roberto Horowitz : Gabriel Gomes</i>	
<b>NON-PERIODIC TRANSITION-TRACKING SWITCHING VIA LEARNING-BASED DECOMPOSITION: HIGH-SPEED NANO-POSITIONING EXPERIMENT EXAMPLE</b> .....	6372
<i>Jiangbo Liu : Qingze Zou</i>	



<b>ONLINE LEARNING-BASED RECEDING HORIZON CONTROL OF TILT-ROTOR TRICOPTER: A CASCADE IMPLEMENTATION .....</b>	<b>6378</b>
<i>Mohit Mehndiratta : Erdal Kayacan</i>	
<b>WIND TURBINE AERODYNAMIC LOAD FLUCTUATION REDUCTION USING MODEL BASED ITERATIVE LEARNING CONTROL .....</b>	<b>6384</b>
<i>Weronika Natalia Nowicka : Bing Chu : Owen Tutty : Eric Rogers</i>	
<b>SAFE REINFORCEMENT LEARNING: LEARNING WITH SUPERVISION FROM AN ADMISSIBLE SET .....</b>	<b>6390</b>
<i>Zhaojian Li : Uros V. Kalabic : Tianshu Chu</i>	
<b>ITERATIVE LEARNING CONTROL FOR STROKE REHABILITATION WITH INPUT DEPENDENT MUSCLE FATIGUE MODELING .....</b>	<b>6396</b>
<i>Fons Luijten : Bing Chu : Eric Rogers</i>	
<b>OBSERVER BASED ITERATIVE LEARNING CONTROLLER DESIGN FOR MIMO SYSTEMS IN DISCRETE TIME .....</b>	<b>6402</b>
<i>Rangana Nayanakalum Jayawardhana : Bijoy Ghosh</i>	
<b>OPTIMAL HANKEL NORM APPROXIMATION FOR CONTINUOUS-TIME DESCRIPTOR SYSTEMS .....</b>	<b>6409</b>
<i>Xingang Cao : Muhammed Bahadir Saltik : Siep Weiland</i>	
<b>MODEL REDUCTION IN LINEAR PARAMETER-VARYING MODELS USING AUTOENCODER NEURAL NETWORKS .....</b>	<b>6415</b>
<i>Syed Z. Rizvi : Farshid Abbasi : Javad Mohammadpour Velni</i>	
<b>MODEL ORDER REDUCTION OF NONLINEAR PARABOLIC PDE SYSTEMS WITH MOVING BOUNDARIES USING SPARSE PROPER ORTHOGONAL DECOMPOSITION METHODOLOGY .....</b>	<b>6421</b>
<i>Harwinder Singh Sidhu : Abhinav Narasingam : Joseph Kwon</i>	
<b>NOVEL CONTROLLER DESIGN BASED ON BLACK BOX SYSTEMS APPROACH .....</b>	<b>6427</b>
<i>Mamadou Lamine Doumbia</i>	
<b>REDUCED ORDER MODELING WITH SLOW ACTUATORS WITH APPLICATION TO LEADER-FOLLOWER SATELLITE CONSTELLATIONS .....</b>	<b>6433</b>
<i>Dillon Foight : Anshu Narang-Siddarth : Mehran Mesbahi</i>	
<b>NONLINEAR MODEL PREDICTIVE CONTROL USING DECOUPLED A-B NET FORMULATION FOR CARBON CAPTURE SYSTEMS' COMPARISON WITH ALGORITHMIC DIFFERENTIATION APPROACH .....</b>	<b>6439</b>
<i>Priyadarshi Mahapatra : Jinliang Ma : Stephen Zitney</i>	
<b>VIBRATIONAL CONTROL IN FLAPPING-WING MICRO-AIR-VEHICLES .....</b>	<b>6445</b>
<i>Haithem Taha : Mohammadali Kiani : Joel Navarro</i>	
<b>IMPROVED SCANNING SPEED OF AFM SUBRESONANT TAPPING MODE WITH SWITCHED DUAL-ACTUATOR CONTROL .....</b>	<b>6451</b>
<i>Piers Echols-Jones : Maxim Dokukin : Igor Sokolov : William Messner</i>	
<b>GROUND TARGET TRACKING USING A MONOCULAR CAMERA AND IMU IN A NONLINEAR OBSERVER SLAM FRAMEWORK .....</b>	<b>6457</b>
<i>Jerel Nielsen : Randal W. Beard</i>	
<b>REDUCTION OF TRANSMISSIONS IN WIRELESS THERMOSTATS WITH SEND-ON-DELTA SAMPLING AND A DEADBAND FILTER .....</b>	<b>6463</b>
<i>Carlos F. Alcala : Timothy Salsbury</i>	
<b>DEVELOPMENT OF DECAY BASED PLS MODEL AND ITS ECONOMIC RUN-TO-RUN CONTROL FOR SEMICONDUCTOR PROCESSES .....</b>	<b>6469</b>
<i>Pengcheng Lu : Junhui Chen : Lei Xie</i>	
<b>DISTRIBUTED METHOD OF MULTIPLIER FOR COUPLED LAGRANGIAN PROBLEMS: A CONTROL APPROACH .....</b>	<b>6475</b>
<i>Abhishek Rawat : Nicola Elia</i>	
<b>OPTIMIZATION-BASED NETWORKED CONTROL OF PROCESS SYSTEMS OVER RESOURCE-CONSTRAINED COMMUNICATION NETWORKS .....</b>	<b>6481</b>
<i>Da Xue : Nael H. El-Farra</i>	
<b>QUANTIZED OUTPUT FEEDBACK STABILIZATION UNDER DOS ATTACKS .....</b>	<b>6487</b>
<i>Masashi Wakaiki : Ahmet Cetinkaya : Hideaki Ishii</i>	
<b>SOLUTION BY SAMPLED-DATA CONTROL OF A CONSENSUS PROBLEM: AN APPROACH BY STABILIZATION IN THE SAMPLE-AND-HOLD SENSE .....</b>	<b>6493</b>
<i>Francesco Cesarone : Pierdomenico Pepe : Nicola Guglielmi</i>	
<b>TRUST-BASED FRAMEWORK FOR RESILIENCE TO SENSOR-TARGETED ATTACKS IN CYBER-PHYSICAL SYSTEMS .....</b>	<b>6499</b>
<i>Tracie Severson : Erick J. Rodriguez-Seda : Brien Croteau : Deepak Krishnankutty : Kiriakos Kiriakidis : Chintan Patel : Nilanjan Banerjee : Ryan Robucci</i>	

<b>EVENT-TRIGGERED LEARNING FOR RESOURCE-EFFICIENT NETWORKED CONTROL</b> .....	6506
<i>Friedrich Solowjow : Dominik Baumann : Jochen Garcke : Sebastian Trimpe</i>	
<b>SELF-TRIGGERED NONSINGULAR TERMINAL SLIDING MODE CONTROL</b> .....	6513
<i>Peng Wu : Wenlong Zhang : Song Han</i>	
<b>A CONSENSUS PROBLEM IN MEAN FIELD SETTING WITH NOISY MEASUREMENTS OF TARGET</b> .....	6521
<i>Tamer Basar</i>	
<b>THE POWER ALLOCATION GAME ON A NETWORK: BALANCED EQUILIBRIUM</b> .....	6527
<i>Yuke Li : A. Stephen Morse</i>	
<b>A KINEMATIC REJOIN METHOD FOR ACTIVE DEFENSE OF NON-MANEUVERABLE AIRCRAFT</b> .....	6533
<i>Isaac Weintraub : Eloy Garcia : Meir Pachter</i>	
<b>INCENTIVE DESIGN IN A DISTRIBUTED PROBLEM WITH STRATEGIC AGENTS</b> .....	6539
<i>Donya Ghavidel Dobakhshari : Pratyush Chakraborty : Enrique Baeyens : Vijay Gupta : Pramod Khargonekar</i>	
<b>DECEPTIVE MULTI-DIMENSIONAL INFORMATION DISCLOSURE OVER A GAUSSIAN CHANNEL</b> .....	6545
<i>Muhammed Omer Sayin : Tamer Basar</i>	
<b>UNCERTAINTY IN MULTI-COMMODITY ROUTING NETWORKS: WHEN DOES IT HELP?</b> .....	6553
<i>Shreyas Sekar : Liyuan Zheng : Lillian J. Ratliff : Baosen Zhang</i>	
<b>DEEP RECURRENT AND CONVOLUTIONAL NETWORKS FOR ACCELERATED FAULT TOLERANT ADAPTIVE FLIGHT CONTROL UNDER SEVERE FAILURES</b> .....	6559
<i>Batuhan Eroglu : Cagatay Sahin : Burak Yuksek : Nazim Kemal Ure : Gokhan Inalhan</i>	
<b>FRACTIONAL-ORDER NONLINEAR SYSTEMS WITH FAULT TOLERANCE</b> .....	6566
<i>Oscar Martinez Fuentes : Fidel Melendez-Vazquez : Rafael Martinez-Guerra</i>	
<b>RESILIENT DISTRIBUTED <math>H_\infty</math> ESTIMATION VIA DYNAMIC REJECTION OF BIASING ATTACKS</b> .....	6572
<i>Valery Ugrinovskii</i>	
<b>SECURE DISTRIBUTED STATE ESTIMATION OF AN LTI SYSTEM OVER TIME-VARYING NETWORKS AND ANALOG ERASURE CHANNELS</b> .....	6578
<i>Aritra Mitra : Shreyas Sundaram</i>	
<b>DISSIPATIVE RESILIENT OBSERVER</b> .....	6584
<i>Mohammed Sami Fadali : Edwin Yaz</i>	
<b>APPROXIMATE BYZANTINE GROUP CONSENSUS IN ROBUST NETWORKS</b> .....	6590
<i>Halil Yigit Oksuz : Mehmet Akar</i>	
<b>DISTRIBUTED UAV SWARM FORMATION CONTROL VIA OBJECT-FOCUSED, MULTI-OBJECTIVE SARSA</b> .....	6596
<i>Christian Speck : Donald J. Bucci</i>	
<b>CONTROL OF TIME-VARYING EPIDEMIC-LIKE STOCHASTIC PROCESSES AND THEIR MEAN-FIELD LIMITS</b> .....	6602
<i>Yingdong Lu : Mark S. Squillante : Chai Wah Wu</i>	
<b>NONPARAMETRIC STOCHASTIC COMPOSITIONAL GRADIENT DESCENT FOR Q-LEARNING IN CONTINUOUS MARKOV DECISION PROBLEMS</b> .....	6608
<i>Ekaterina Tolstaya : Alec Koppel : Ethan Stump : Alejandro Ribeiro</i>	
<b>A MARKOVIAN FRAMEWORK FOR MODELING DYNAMIC NETWORK TRAFFIC</b> .....	6616
<i>Xilei Zhao : James C. Spall</i>	
<b>ROBUST NASH EQUILIBRIUM STRATEGY FOR UNCERTAIN MARKOV JUMP LINEAR STOCHASTIC SYSTEMS</b> .....	6622
<i>Hiroaki Mukaidani</i>	
<b>ROBUST PARETO SUBOPTIMAL STRATEGY FOR UNCERTAIN MARKOV JUMP LINEAR STOCHASTIC SYSTEMS WITH MULTIPLE DECISION MAKERS</b> .....	6628
<i>Hiroaki Mukaidani : Hua Xu : Vasile Dragan</i>	
<b>OPTIMAL LOCAL AND REMOTE CONTROLLERS WITH UNRELIABLE COMMUNICATION: THE INFINITE HORIZON CASE</b> .....	6634
<i>Yi Ouyang : Seyed Mohammad Asghari : Ashutosh Nayyar</i>	
<b>A CONNECTIVITY PRESERVING FRAMEWORK FOR DISTRIBUTED MOTION COORDINATION IN PROXIMITY NETWORKS</b> .....	6640
<i>Hassan Jaleel : Waseem Abbas</i>	
<b>SCALABLE OPTIMAL FLEXIBILITY CONTROL OF DISTRIBUTED LOADS IN THE POWER GRID</b> .....	6646
<i>Reza Ghaemi : Masoud Abbaszadeh : Pierino Bonanni</i>	
<b>TIME OPTIMAL CONSENSUS TRACKING FOR KINEMATIC POINTS IN A PLANE</b> .....	6652
<i>Aditya Chaudhari : Debraj Chakraborty</i>	

<b>PASSIVITY AND DECENTRALIZED MPC OF SWITCHED GRAPH-BASED POWER FLOW SYSTEMS</b> .....	6658
<i>Herschel Pangborn : Justin Koeln : Andrew G. Alleyne</i>	
<b>DECENTRALIZED SLIDING MODE LFC FOR NONLINEAR INTERCONNECTED POWER SYSTEM WITH TIME DELAY</b> .....	6666
<i>Adrian Emeka Onyeka : Xing-Gang Yan : Zehui Mao : Qingling Zhang</i>	
<b>DATA-DRIVEN FEEDFORWARD LEARNING USING NON-CAUSAL RATIONAL BASIS FUNCTIONS: APPLICATION TO AN INDUSTRIAL FLATBED PRINTER</b> .....	6672
<i>Lennart Blanken : Goksan Isil : Sjirk Holger Koekebakker : Tom Oomen</i>	
<b>COMPRESSIONAL WAVE DISTURBANCE SUPPRESSION FOR NANOSCALE TRACK-FOLLOWING ON FLEXIBLE TAPE MEDIA</b> .....	6678
<i>Simeon Furrer : Angeliki Pantazi : Giovanni Cherubini : Mark Lantz</i>	
<b>ITERATIVE DECONVOLUTION FOR EXPOSURE PLANNING IN SCANNING LASER LITHOGRAPHY</b> .....	6684
<i>Omid Tayefeh Ghalehbeygi : John O'Connor : Ben Routley : Andrew J. Fleming</i>	
<b>EXPERIMENTAL VALIDATION OF INVERSION TECHNIQUES FOR AN LPV MOTION SYSTEM</b> .....	6690
<i>Yanin Kasemsinsup : Aditya Ferry Ardyanto : Hans Butler : Marcel Heertjes : Siep Weiland</i>	
<b>REFERENCE MODULATION FOR PERFORMANCE ENHANCEMENT IN MOTION CONTROL SYSTEMS</b> .....	6697
<i>Youngwoo Lee : Liting Sun : Jun Moon : Masayoshi Tomizuka</i>	
<b>OPTIMAL INPUT SHAPING WITH FINITE RESOLUTION COMPUTED FROM STEP-RESPONSE EXPERIMENTAL DATA</b> .....	6703
<i>Alicia Dautt-Silva : Raymond A. de Callafon</i>	
<b>HUMAN HEAD AND BINOCULAR EYE MOVEMENT CONTROL VIA FEEDBACK LINEARIZATION</b> .....	6709
<i>Bijoy Ghosh : Bhagya Athukorallage</i>	
<b>COLLABORATIVE PLATOONING OF AUTOMATED VEHICLES USING VARIABLE TIME-GAPS</b> .....	6715
<i>Aria HasanazadeZonuzy : Sina Arefizadeh : Alireza Talebpour : Srinivas Shakkottai : Swaroop Darbha</i>	
<b>A TIME-WARPING TRANSFORMATION FOR TIME-OPTIMAL MOVEMENT IN DIFFERENTIALLY FLAT SYSTEMS</b> .....	6723
<i>Marcus Carl Greiff</i>	
<b>A NONLINEAR CONTROL DESIGN TO IMPROVE THE DYNAMIC STABILITY OF A MULTI-MACHINE POWER SYSTEM WITH DFIG-BASED WIND TURBINES</b> .....	6731
<i>Mohammad Javad Morshed : Afef Fekih</i>	
<b>LOW LEVEL ARCHITECTURE FOR AUTOMATIC TAKEOFF AND LANDING OF FIXED WING UAV</b> .....	6737
<i>Hector Manjarrez : Jorge Davila : Rogelio Lozano</i>	
<b>OPTIMIZATION OF OUTPUT FUNCTIONS WITH NONHOLONOMIC VIRTUAL CONSTRAINTS IN UNDERACTUATED BIPEDAL WALKING CONTROL</b> .....	6743
<i>Wai Kei Chan : Yan Gu : Bin Yao</i>	
<b>DC-DC BUCK-BOOST CONVERTERS WITH UNKNOWN CPL: AN ADAPTIVE PBC</b> .....	6749
<i>Wei He : Carlos Abraham Soriano-Rangel : Romeo Ortega : Alessandro Astolfi : Fernando Mancilla-David : Shihua Li</i>	
<b>ON THE ROBUST FLAT-FILTERING CONTROL OF MIMO NONLINEAR SYSTEMS: THE PMSM EXPERIMENTAL CASE STUDY</b> .....	6755
<i>Eric William Zurita-Bustamante : Alberto Luviano-Juarez : Hebertt Sira-Ramirez</i>	
<b>GEOMETRIC FAULT DETECTION AND IDENTIFICATION IN POWER INVERTERS WITH HIGH ORDER FILTERS</b> .....	6761
<i>Mohsen Azizi</i>	
<b>INNER-OUTER LOOP BASED ROBUST ACTIVE DAMPING FOR LCL RESONANCE IN GRID-CONNECTED INVERTERS USING GRID CURRENT FEEDBACK</b> .....	6766
<i>Aratrik Sarkar : Karan Puttannaiah : Armando A. Rodriguez</i>	
<b>HYBRID CONTROL SYSTEM IN AN EFFICIENT LED DRIVER</b> .....	6772
<i>Mohammad Tahan : David Bamgboje : Tingshu Hu</i>	
<b>SLIDING MODES FOR VOLTAGE REGULATION AND CURRENT SHARING IN DC MICROGRIDS</b> .....	6778
<i>Sebastian Trip : Michele Cucuzzella : Claudio De Persis : Xiaodong Cheng : Antonella Ferrara</i>	
<b>GUARANTEED TRANSIENT RESPONSE CONTROL FOR A MARINE VESSEL WITH TIME-VARYING CONSTRAINT BY FUZZY APPROXIMATOR</b> .....	6784
<i>Linghuan Kong : Wei He : Chenguang Yang : Guang Li</i>	

<b>MIXED POLYNOMIAL CHAOS AND WORST-CASE SYNTHESIS APPROACH TO ROBUST OBSERVER BASED LINEAR QUADRATIC REGULATION .....</b>	<b>6798</b>
<i>Yiming Wan : Richard D. Braatz</i>	
<b>ROBUST STATIC H-<math>\infty</math> OUTPUT-FEEDBACK CONTROL USING POLYNOMIAL CHAOS .....</b>	<b>6804</b>
<i>Yiming Wan : Dongying Shen : Sergio Lucia : Rolf Findeisen : Richard D. Braatz</i>	
<b>TRACKING, PARAMETER IDENTIFICATION, AND CONVERGENCE RATES FOR MODEL REFERENCE ADAPTIVE CONTROL .....</b>	<b>6810</b>
<i>Michael Malisoff : Selahattin Burak Sarsilmaz : Tansel Yucelen : Jonathan Muse</i>	
<b>Author Index</b>	