

35th AAAI Conference on Artificial Intelligence (AAAI-21)

Volume 10: AAAI Technical Tracks

- Machine Learning III

Online
2 – 9 February 2021

Part 1 of 2

ISBN: 978-1-7138-3596-7

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2021) by Association for the Advancement of Artificial Intelligence
All rights reserved.

Printed with permission by Curran Associates, Inc. (2021)

For permission requests, please contact Association for the Advancement of Artificial Intelligence
at the address below.

Association for the Advancement of Artificial Intelligence
2275 East Bayshore Road
Suite 160
Palo Alto, California 94303
USA

Phone: 1-650-328-3123
Fax: 1-650-321-4457

<https://aaai.org/Press/press.php>

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
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

PART 1

AAAI TECHNICAL TRACK ON MACHINE LEARNING III

SYNERGETIC LEARNING OF HETEROGENEOUS TEMPORAL SEQUENCES FOR MULTI-HORIZON PROBABILISTIC FORECASTING	8420
<i>Longyuan Li, Jihai Zhang, Junchi Yan, Yaohui Jin, Yunhao Zhang, Yanjie Duan, Guangjian Tian</i>	
BAYESIAN DISTRIBUTIONAL POLICY GRADIENTS	8429
<i>Luchen Li, A. Aldo Faisal</i>	
LEARNING GRAPH NEURAL NETWORKS WITH APPROXIMATE GRADIENT DESCENT	8438
<i>Qunwei Li, Shaofeng Zou, Wenliang Zhong</i>	
MULTI-VIEW REPRESENTATION LEARNING WITH MANIFOLD SMOOTHNESS	8447
<i>Shu Li, Wei Wang, Wen-Tao Li, Pan Chen</i>	
BI-CLASSIFIER DETERMINACY MAXIMIZATION FOR UNSUPERVISED DOMAIN ADAPTATION	8455
<i>Shuang Li, Fangrui Lv, Binhui Xie, Chi Harold Liu, Jian Liang, Chen Qin</i>	
SUBLINEAR CLASSICAL AND QUANTUM ALGORITHMS FOR GENERAL MATRIX GAMES	8465
<i>Tongyang Li, Chunhao Wang, Shouvanik Chakrabarti, Xiaodi Wu</i>	
A FREE LUNCH FOR UNSUPERVISED DOMAIN ADAPTIVE OBJECT DETECTION WITHOUT SOURCE DATA	8474
<i>Xianfeng Li, Weijie Chen, Di Xie, Shicai Yang, Peng Yuan, Shiliang Pu, Yueting Zhuang</i>	
IMPROVING ADVERSARIAL ROBUSTNESS VIA PROBABILISTICALLY COMPACT LOSS WITH LOGIT CONSTRAINTS	8482
<i>Xin Li, Xiangrui Li, Deng Pan, Dongxiao Zhu</i>	
MFES-HB: EFFICIENT HYPERBAND WITH MULTI-FIDELITY QUALITY MEASUREMENTS	8491
<i>Yang Li, Yu Shen, Jiawei Jiang, Jinyang Gao, Ce Zhang, Bin Cui</i>	
LEARNED EXTRAGRADIENT ISTA WITH INTERPRETABLE RESIDUAL STRUCTURES FOR SPARSE CODING	8501
<i>Yangyang Li, Lin Kong, Fanhua Shang, Yuanyuan Liu, Hongying Liu, Zhouchen Lin</i>	
ONE-SHOT GRAPH NEURAL ARCHITECTURE SEARCH WITH DYNAMIC SEARCH SPACE	8510
<i>Yanxi Li, Zean Wen, Yunhe Wang, Chang Xu</i>	
SCHEDULED SAMPLING IN VISION-LANGUAGE PRETRAINING WITH DECOUPLED ENCODER-DECODER NETWORK	8518
<i>Yehao Li, Yingwei Pan, Ting Yao, Jingwen Chen, Tao Mei</i>	
ONLINE OPTIMAL CONTROL WITH AFFINE CONSTRAINTS	8527
<i>Yingying Li, Subhro Das, Na Li</i>	

TRQ: TERNARY NEURAL NETWORKS WITH RESIDUAL QUANTIZATION	8538
<i>Yue Li, Wenrui Ding, Chunlei Liu, Baochang Zhang, Guodong Guo</i>	
CONTRASTIVE CLUSTERING	8547
<i>Yunfan Li, Peng Hu, Zitao Liu, Dezhong Peng, Joey Tianyi Zhou, Xi Peng</i>	
LONGITUDINAL DEEP KERNEL GAUSSIAN PROCESS REGRESSION	8556
<i>Junjie Liang, Yanting Wu, Dongkuan Xu, Vasant G Honavar</i>	
LARGE NORMS OF CNN LAYERS DO NOT HURT ADVERSARIAL ROBUSTNESS	8565
<i>Youwei Liang, Dong Huang</i>	
DOUBLY RESIDUAL NEURAL DECODER: TOWARDS LOW-COMPLEXITY HIGH- PERFORMANCE CHANNEL DECODING	8574
<i>Siyu Liao, Chunhua Deng, Miao Yin, Bo Yuan</i>	
FROM LABEL SMOOTHING TO LABEL RELAXATION	8583
<i>Julian Lienen, Eyke Hüllermeier</i>	
SAMPLE SELECTION FOR UNIVERSAL DOMAIN ADAPTATION	8592
<i>Omri Lifshitz, Lior Wolf</i>	
CLASS-ATTENTIVE DIFFUSION NETWORK FOR SEMI-SUPERVISED CLASSIFICATION	8601
<i>Jongin Lim, Daeho Um, Hyung Jin Chang, Dae Ung Jo, Jin Young Choi</i>	
AUTO-ENCODING TRANSFORMATIONS IN REPARAMETERIZED LIE GROUPS FOR UNSUPERVISED LEARNING	8610
<i>Feng Lin, Haohang Xu, Houqiang Li, Hongkai Xiong, Guo-Jun Qi</i>	
MULTI-PROXY WASSERSTEIN CLASSIFIER FOR IMAGE CLASSIFICATION	8618
<i>Benlin Liu, Yongming Rao, Jiwen Lu, Jie Zhou, Cho-Jui Hsieh</i>	
TRANSTAILOR: PRUNING THE PRE-TRAINED MODEL FOR IMPROVED TRANSFER LEARNING	8627
<i>Bingyan Liu, Yifeng Cai, Yao Guo, Xiangqun Chen</i>	
LEARNING A FEW-SHOT EMBEDDING MODEL WITH CONTRASTIVE LEARNING	8635
<i>Chen Liu, Yanwei Fu, Chengming Xu, Siqian Yang, Jilin Li, Chengjie Wang, Li Zhang</i>	
UNCHAIN THE SEARCH SPACE WITH HIERARCHICAL DIFFERENTIABLE ARCHITECTURE SEARCH	8644
<i>Guanting Liu, Yujie Zhong, Sheng Guo, Matthew R. Scott, Weilin Huang</i>	
OVERCOMING CATASTROPHIC FORGETTING IN GRAPH NEURAL NETWORKS	8653
<i>Huihui Liu, Yiding Yang, Xinchao Wang</i>	
STABLE ADVERSARIAL LEARNING UNDER DISTRIBUTIONAL SHIFTS	8662
<i>Jiashuo Liu, Zheyang Shen, Peng Cui, Linjun Zhou, Kun Kuang, Bo Li, Yishi Lin</i>	
HIERARCHICAL MULTIPLE KERNEL CLUSTERING	8671
<i>Jiyuan Liu, Xinwang Liu, Siwei Wang, Sihang Zhou, Yuexiang Yang</i>	
DYNAMICALLY GROWN GENERATIVE ADVERSARIAL NETWORKS	8680
<i>Lanlan Liu, Yuting Zhang, Jia Deng, Stefano Soatto</i>	

FLAME: DIFFERENTIALLY PRIVATE FEDERATED LEARNING IN THE SHUFFLE MODEL	8688
<i>Ruixuan Liu, Yang Cao, Hong Chen, Ruoyang Guo, Masatoshi Yoshikawa</i>	
POST-TRAINING QUANTIZATION WITH MULTIPLE POINTS: MIXED PRECISION WITHOUT MIXED PRECISION	8697
<i>Xingchao Liu, Mao Ye, Dengyong Zhou, Qiang Liu</i>	
TRAIN A ONE-MILLION-WAY INSTANCE CLASSIFIER FOR UNSUPERVISED VISUAL REPRESENTATION LEARNING	8706
<i>Yu Liu, Lianghua Huang, Pan Pan, Bin Wang, Yinghui Xu, Rong Jin</i>	
ROSITA: REFINED BERT COMPRESSION WITH INTEGRATED TECHNIQUES	8715
<i>Yuanxin Liu, Zheng Lin, Fengcheng Yuan</i>	
TASK ALIGNED GENERATIVE META-LEARNING FOR ZERO-SHOT LEARNING	8723
<i>Zhe Liu, Yun Li, Lina Yao, Xianzhi Wang, Guodong Long</i>	
LEARNING FROM EXTREME BANDIT FEEDBACK	8732
<i>Romain Lopez, Inderjit S. Dhillon, Michael I. Jordan</i>	
IMPROVING CAUSAL DISCOVERY BY OPTIMAL BAYESIAN NETWORK LEARNING	8741
<i>Ni Y Lu, Kun Zhang, Changhe Yuan</i>	
STOCHASTIC GRAPHICAL BANDITS WITH ADVERSARIAL CORRUPTIONS	8749
<i>Shiyin Lu, Guanghui Wang, Lijun Zhang</i>	
STOCHASTIC BANDITS WITH GRAPH FEEDBACK IN NON-STATIONARY ENVIRONMENTS	8758
<i>Shiyin Lu, Yao Hu, Lijun Zhang</i>	
DECENTRALIZED POLICY GRADIENT DESCENT ASCENT FOR SAFE MULTI-AGENT REINFORCEMENT LEARNING	8767
<i>Songtao Lu, Kaiqing Zhang, Tianyi Chen, Tamer Basar, Lior Horesh</i>	
TAILORING EMBEDDING FUNCTION TO HETEROGENEOUS FEW-SHOT TASKS BY GLOBAL AND LOCAL FEATURE ADAPTORS	8776
<i>Su Lu, Han-Jia Ye, De-Chuan Zhan</i>	
PULNS: POSITIVE-UNLABELED LEARNING WITH EFFECTIVE NEGATIVE SAMPLE SELECTOR	8784
<i>Chuan Luo, Pu Zhao, Chen Chen, Bo Qiao, Chao Du, Hongyu Zhang, Wei Wu, Shaowei Cai, Bing He, Saravanakumar Rajmohan, Qingwei Lin</i>	
REVISITING CO-OCCURRING DIRECTIONS: SHARPER ANALYSIS AND EFFICIENT ALGORITHM FOR SPARSE MATRICES	8793
<i>Luo Luo, Cheng Chen, Guangzeng Xie, Haishan Ye</i>	
SEMI-SUPERVISED MEDICAL IMAGE SEGMENTATION THROUGH DUAL-TASK CONSISTENCY	8801
<i>Xiangde Luo, Jieneng Chen, Tao Song, Guotai Wang</i>	
ADAPTIVE KNOWLEDGE DRIVEN REGULARIZATION FOR DEEP NEURAL NETWORKS	8810
<i>Zhaojing Luo, Shaofeng Cai, Can Cui, Beng Chin Ooi, Yang Yang</i>	

MULTI-DOMAIN MULTI-TASK REHEARSAL FOR LIFELONG LEARNING	8819
<i>Fan Lyu, Shuai Wang, Wei Feng, Zihan Ye, Fuyuan Hu, Song Wang</i>	
ON THE ADEQUACY OF UNTUNED WARMUP FOR ADAPTIVE OPTIMIZATION	8828
<i>Jerry Ma, Denis Yarats</i>	
LEARNING REPRESENTATIONS FOR INCOMPLETE TIME SERIES CLUSTERING	8837
<i>Qianli Ma, Chuxin Chen, Sen Li, Garrison W. Cottrell</i>	
JOINT-LABEL LEARNING BY DUAL AUGMENTATION FOR TIME SERIES CLASSIFICATION	8847
<i>Qianli Ma, Zhenjing Zheng, Jiawei Zheng, Sen Li, Wanqing Zhuang, Garrison W. Cottrell</i>	
UNSUPERVISED LEARNING OF GRAPH HIERARCHICAL ABSTRACTIONS WITH DIFFERENTIABLE COARSENING AND OPTIMAL TRANSPORT	8856
<i>Tengfei Ma, Jie Chen</i>	

PART 2

SEQUENTIAL ATTACKS ON KALMAN FILTER-BASED FORWARD COLLISION WARNING SYSTEMS	8865
<i>Yuzhe Ma, Jon A Sharp, Ruizhe Wang, Earlene Fernandes, Xiaojin Zhu</i>	
EXACT REDUCTION OF HUGE ACTION SPACES IN GENERAL REINFORCEMENT LEARNING	8874
<i>Sultan J. Majeed, Marcus Hutter</i>	
COMPOSITE ADVERSARIAL ATTACKS	8884
<i>Xiaofeng Mao, Yuefeng Chen, Shuhui Wang, Hang Su, Yuan He, Hui Xue</i>	
DEEP MUTUAL INFORMATION MAXIMIN FOR CROSS-MODAL CLUSTERING	8893
<i>Yiqiao Mao, Xiaoqiang Yan, Qiang Guo, Yangdong Ye</i>	
SEARCHING FOR MACHINE LEARNING PIPELINES USING A CONTEXT-FREE GRAMMAR	8902
<i>Radu Marinescu, Akihiro Kishimoto, Parikshit Ram, Ambrish Rawat, Martin Wistuba, Paulito P. Palmes, Adi Botea</i>	
SCALABLE GRAPH NETWORKS FOR PARTICLE SIMULATIONS	8912
<i>Karolis Martinkus, Aurelien Lucchi, Nathanaël Perraudin</i>	
INFINITE GAUSSIAN MIXTURE MODELING WITH AN IMPROVED ESTIMATION OF THE NUMBER OF CLUSTERS	8921
<i>Avi Matza, Yuval Bistriz</i>	
EXACERBATING ALGORITHMIC BIAS THROUGH FAIRNESS ATTACKS	8930
<i>Ninareh Mehrabi, Muhammad Naveed, Fred Morstatter, Aram Galstyan</i>	
PHYSARUM POWERED DIFFERENTIABLE LINEAR PROGRAMMING LAYERS AND APPLICATIONS	8939
<i>Zihang Meng, Sathya N. Ravi, Vikas Singh</i>	
LENIENT REGRET FOR MULTI-ARMED BANDITS	8950
<i>Nadav Merlis, Shie Mannor</i>	

POLICY OPTIMIZATION AS ONLINE LEARNING WITH MEDIATOR FEEDBACK	8958
<i>Alberto Maria Metelli, Matteo Papini, Pierluca D'Oro, Marcello Restelli</i>	
CONSISTENCY AND FINITE SAMPLE BEHAVIOR OF BINARY CLASS PROBABILITY ESTIMATION	8967
<i>Alexander Mey, Marco Loog</i>	
DISCOVERING FULLY ORIENTED CAUSAL NETWORKS	8975
<i>Osman A Mian, Alexander Marx, Jilles Vreeken</i>	
GENERATIVE SEMI-SUPERVISED LEARNING FOR MULTIVARIATE TIME SERIES IMPUTATION	8983
<i>Xiaoye Miao, Yangyang Wu, Jun Wang, Yunjun Gao, Xudong Mao, Jianwei Yin</i>	
A GENERAL CLASS OF TRANSFER LEARNING REGRESSION WITHOUT IMPLEMENTATION COST	8992
<i>Shunya Minami, Song Liu, Stephen Wu, Kenji Fukumizu, Ryo Yoshida</i>	
SCHEDULING OF TIME-VARYING WORKLOADS USING REINFORCEMENT LEARNING	9000
<i>Shanka Subhra Mondal, Nikhil Sheoran, Subrata Mitra</i>	
IMPROVED MUTUAL INFORMATION ESTIMATION	9009
<i>Youssef Mroueh, Igor Melnyk, Pierre Dognin, Jarret Ross, Tom Sercu</i>	
TEXT-BASED RL AGENTS WITH COMMONSENSE KNOWLEDGE: NEW CHALLENGES, ENVIRONMENTS AND BASELINES	9018
<i>Keerthiram Murugesan, Mattia Atzeni, Pavan Kapanipathi, Pushkar Shukla, Sadhana Kumaravel, Gerald Tesauro, Kartik Talamadupula, Mrinmaya Sachan, Murray Campbell</i>	
TASK-AGNOSTIC EXPLORATION VIA POLICY GRADIENT OF A NON-PARAMETRIC STATE ENTROPY ESTIMATE	9028
<i>Mirco Mutti, Lorenzo Pratissoli, Marcello Restelli</i>	
ELASTIC CONSISTENCY: A PRACTICAL CONSISTENCY MODEL FOR DISTRIBUTED STOCHASTIC GRADIENT DESCENT	9037
<i>Giorgi Nadiradze, Iliia Markov, Bapi Chatterjee, Vyacheslav Kungurtsev, Dan Alistarh</i>	
GAME OF GRADIENTS: MITIGATING IRRELEVANT CLIENTS IN FEDERATED LEARNING	9046
<i>Lokesh Nagalapatti, Ramasuri Narayanam</i>	
OBJECTIVE-BASED HIERARCHICAL CLUSTERING OF DEEP EMBEDDING VECTORS	9055
<i>Stanislav Naumov, Grigory Yaroslavtsev, Dmitrii Avdiukhin</i>	
5* KNOWLEDGE GRAPH EMBEDDINGS WITH PROJECTIVE TRANSFORMATIONS	9064
<i>Mojtaba Nayyeri, Sahar Vahdati, Can Aykul, Jens Lehmann</i>	
ADVICE-GUIDED REINFORCEMENT LEARNING IN A NON-MARKOVIAN ENVIRONMENT	9073
<i>Daniel Neider, Jean-Raphael Gaglione, Ivan Gavran, Ufuk Topcu, Bo Wu, Zhe Xu</i>	
CLINICAL RISK PREDICTION WITH TEMPORAL PROBABILISTIC ASYMMETRIC MULTI-TASK LEARNING	9081
<i>A. Tuan Nguyen, Hyewon Jeong, Eunho Yang, Sung Ju Hwang</i>	

MODULAR GRAPH TRANSFORMER NETWORKS FOR MULTI-LABEL IMAGE CLASSIFICATION	9092
<i>Hoang D. Nguyen, Xuan-Son Vu, Duc-Trong Le</i>	
DIFFERENTIALLY PRIVATE K-MEANS VIA EXPONENTIAL MECHANISM AND MAX COVER	9101
<i>Huy L. Nguyen, Anamay Chaturvedi, Eric Z Xu</i>	
MINIMUM ROBUST MULTI-SUBMODULAR COVER FOR FAIRNESS	9109
<i>Lan N. Nguyen, My T. Thai</i>	
TEMPORAL LATENT AUTO-ENCODER: A METHOD FOR PROBABILISTIC MULTIVARIATE TIME SERIES FORECASTING	9117
<i>Nam Nguyen, Brian Quanz</i>	
AN INFORMATION-THEORETIC FRAMEWORK FOR UNIFYING ACTIVE LEARNING PROBLEMS	9126
<i>Quoc Phong Nguyen, Bryan Kian Hsiang Low, Patrick Jaillet</i>	
TOP-K RANKING BAYESIAN OPTIMIZATION	9135
<i>Quoc Phong Nguyen, Sebastian Tay, Bryan Kian Hsiang Low, Patrick Jaillet</i>	
DISTRIBUTIONAL REINFORCEMENT LEARNING VIA MOMENT MATCHING	9144
<i>Thanh Nguyen-Tang, Sunil Gupta, Svetha Venkatesh</i>	
PRECISION-BASED BOOSTING	9153
<i>Mohammad Hossein Nikravan, Marjan Movahedan, Sandra Zilles</i>	
IMPROVING MODEL ROBUSTNESS BY ADAPTIVELY CORRECTING PERTURBATION LEVELS WITH ACTIVE QUERIES	9161
<i>Kun-Peng Ning, Lue Tao, Songcan Chen, Sheng-Jun Huang</i>	
LEARNING OF STRUCTURALLY UNAMBIGUOUS PROBABILISTIC GRAMMARS	9170
<i>Dolav Nitay, Dana Fisman, Michal Ziv-Ukelson</i>	
RT3D: ACHIEVING REAL-TIME EXECUTION OF 3D CONVOLUTIONAL NEURAL NETWORKS ON MOBILE DEVICES	9179
<i>Wei Niu, Mengshu Sun, Zhengang Li, Jou-An Chen, Jiexiong Guan, Xipeng Shen, Yanzhi Wang, Sijia Liu, Xue Lin, Bin Ren</i>	
WARM STARTING CMA-ES FOR HYPERPARAMETER OPTIMIZATION	9188
<i>Masahiro Nomura, Shuhei Watanabe, Youhei Akimoto, Yoshihiko Ozaki, Masaki Onishi</i>	
INVERSE REINFORCEMENT LEARNING FROM LIKE-MINDED TEACHERS	9197
<i>Ritesh Noothigattu, Tom Yan, Ariel D. Procaccia</i>	
MULTINOMIAL LOGIT CONTEXTUAL BANDITS: PROVABLE OPTIMALITY AND PRACTICALITY	9205
<i>Min-Hwan Oh, Garud Iyengar</i>	
LEARNING DEEP GENERATIVE MODELS FOR QUEUING SYSTEMS	9214
<i>Cesar Ojeda, Kostadin Cvejovski, Bodgan Georgiev, Christian Bauckhage, Jannis Schuecker, Ramses J. Sanchez</i>	
OT-FLOW: FAST AND ACCURATE CONTINUOUS NORMALIZING FLOWS VIA OPTIMAL TRANSPORT	9223
<i>Derek Onken, Samy Wu Fung, Xingjian Li, Lars Ruthotto</i>	

FC-GAGA: FULLY CONNECTED GATED GRAPH ARCHITECTURE FOR SPATIO-TEMPORAL TRAFFIC FORECASTING	9233
<i>Boris N. Oreshkin, Arezou Amini, Lucy Coyle, Mark Coates</i>	
META-LEARNING FRAMEWORK WITH APPLICATIONS TO ZERO-SHOT TIME-SERIES FORECASTING	9242
<i>Boris N. Oreshkin, Dmitri Carпов, Nicolas Chapados, Yoshua Bengio</i>	
AUGMENTED EXPERIMENT IN MATERIAL ENGINEERING USING MACHINE LEARNING	9251
<i>Aomar Osmani, Massinissa Hamidi, Salah Bouhouche</i>	
SECOND ORDER TECHNIQUES FOR LEARNING TIME-SERIES WITH STRUCTURAL BREAKS	9259
<i>Takayuki Osogami</i>	
DEFENDING AGAINST BACKDOORS IN FEDERATED LEARNING WITH ROBUST LEARNING RATE	9268
<i>Mustafa Safa Ozdayi, Murat Kantarcioglu, Yulia R. Gel</i>	
ROBUSTNESS GUARANTEES FOR MODE ESTIMATION WITH AN APPLICATION TO BANDITS	9277
<i>Aldo Pacchiano, Heinrich Jiang, Michael I. Jordan</i>	
DISENTANGLED INFORMATION BOTTLENECK	9285
<i>Ziqi Pan, Li Niu, Jianfu Zhang, Liqing Zhang</i>	
NASTRANSFER: ANALYZING ARCHITECTURE TRANSFERABILITY IN LARGE SCALE NEURAL ARCHITECTURE SEARCH	9294
<i>Rameswar Panda, Michele Merler, Mayoore S Jaiswal, Hui Wu, Kandan Ramakrishnan, Ulrich Finkler, Chun-Fu Richard Chen, Minsik Cho, Rogerio Feris, David Kung, Bishwaranjan Bhattacharjee</i>	
ROBUST REINFORCEMENT LEARNING: A CASE STUDY IN LINEAR QUADRATIC REGULATION	9303
<i>Bo Pang, Zhong-Ping Jiang</i>	
TEMPERED SIGMOID ACTIVATIONS FOR DEEP LEARNING WITH DIFFERENTIAL PRIVACY	9312
<i>Nicolas Papernot, Abhradeep Thakurta, Shuang Song, Steve Chien, Úlfar Erlingsson</i>	
VECTOR QUANTIZED BAYESIAN NEURAL NETWORK INFERENCE FOR DATA STREAMS	9322
<i>Namuk Park, Taekyu Lee, Songkuk Kim</i>	
MAXIMUM ROAMING MULTI-TASK LEARNING	9331
<i>Lucas Pascal, Pietro Michiardi, Xavier Bost, Benoit Huet, Maria A. Zuluaga</i>	
FAST PCA IN 1-D WASSERSTEIN SPACES VIA B-SPLINES REPRESENTATION AND METRIC PROJECTION	9342
<i>Matteo Pegoraro, Mario Beraha</i>	

Author Index