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(ASMA/SPSC 2010)

**Cagliari, Italy
13 – 15 September 2010**



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Technical Program

Time	Astrea	Cyprea	Nautilus	Opalia
Tuesday, September 14				
09:00			Opening Session	
11:20	NC: Network Coding			AIS: Automatic Identification System
14:10	DTN: Delay Tolerant Networks	SAP1: System Architecture & Performance I		MC: Modulation & Coding
16:30	MBC: Multibeam Communications	SAP2: System Architecture & Performance II		EST: Estimation & Synchronization Theory
Wednesday, September 15				
09:00		Spectrum Sharing in the Future (Panel)		
11:20	NP: Navigation & Positioning	CC: Cooperative Communications		SP: Signal Processing
14:30	CT: Communication Theory	SBS: S-Band Systems		NetP: Network Protocols

Tuesday, September 14

09:00 - 11:00

[Opening Session](#)

11:20 - 12:40

[AIS: Automatic Identification System](#)

Advanced Receiver Design for Satellite-Based AIS Signal Detection

Paolo Burzigotti (European Space Agency ESA/ESTEC, The Netherlands); Alberto Ginesi (ESA/ESTEC, The Netherlands); Giulio Colavolpe (University of Parma, Italy)
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European Enhanced Space-Based AIS System Study

Veronica De Perini (Carlo Gavazzi Space, Italy); Andrea Scorzolini (Telespazio, Italy); Elena Razzano (Carlo Gavazzi Space, Italy); Susana Mendes (Edisoft, Portugal); Pierluigi Fiori (Elman, Italy); Angelo Sorbo (Information Technology services, Italy); Giulio Colavolpe (University of Parma, Italy)
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Space-Based Detection of AIS Signals

Frank te Hennepe (OHB-System AG, Germany); Rita Rinaldo (ESA, The Netherlands); Alberto Ginesi (ESA/ESTEC, The Netherlands); Carsten Tobehn (OHB-System AG, Germany); Matthias Wieser (OHB-System AG, Germany); Oystein Olsen (FFI, Norway); Oystein Hellenen (FFI, Norway); Frode Storesund (Kongsberg Seatex AS, Norway); Remi Challamel (Thales Alenia Space France, France)
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[NC: Network Coding](#)

A Comparison of Different Physical Layer Network Coding Techniques for the Satellite Environment

Francesco Rossetto (DLR (German Aerospace Center), Germany)
pp. 25-30

How Feasible is Network Coding in Current Satellite Systems?

Fausto Vieira (Universidade do Porto, Portugal); Saurabh Shintre (Instituto de Telecomunicações, India); Joao Barros (University of Porto, Portugal)
pp. 31-37

Queuing Aspects of Packet Coding Based Bidirectional Communication Over Satellite Channels

Angela Isabel Barbero (University of Valladolid, Spain); Øyvind Ytrehus (University of Bergen, Norway)
pp. 38-45

Joint Control of Delay and Packet Drop Rate in Satellite Systems Using Network Coding

Sameh Sorour (University of Toronto, Canada); Shahrokh Valaee (University of Toronto, Canada); Nader Alagha (European Space Agency, The Netherlands)
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14:10 - 16:10

[DTN: Delay Tolerant Networks](#)

Fair Admission Control Model for Aircrafts Bundles Data Transmission for Delay Tolerant Networks

Haitham Cruickshank (University of Surrey, United Kingdom); Mohammad Alsiyabi (University of Surrey, United Kingdom)
pp. 54-61

Satellite Communications: From PEPs to DTN

Carlo Caini (University of Bologna, Italy); Rosario Firrincieli (University of Bologna, Italy); Haitham Cruickshank (University of Surrey, United Kingdom); Mario Marchese (DIST- University of Genoa, Italy)
pp. 62-67

A Protocol Design for Incorporating Erasure Codes Within CCSDS: the Case of DTN Protocol Architecture

Tomaso De Cola (German Aerospace Center (DLR), Germany)
pp. 68-73

A DTN-Oriented Protocol Design for Satellite Based Architectures

Cesare Roseti (University of Rome "Tor Vergata", Italy); Michele Luglio (Univ. of Rome Tor Vergata - Dip. Ing. Elettronica, Italy); Tomaso De Cola (German Aerospace Center (DLR), Germany)
pp. 74-80

Where Does Transport Layer Fit Into Space DTN Architecture?

Giorgos Papastergiou (Democritus University of Thrace, Greece); Christos V. Samaras (Democritus University of Thrace, Greece); Vassilis Tsaoussidis (Democritus University of Thrace, Greece)
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Endpoint Discovery and Contact Graph Routing in Space and Terrestrial DTNs

Stephen Farrell (Trinity College Dublin, Ireland)
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[MC: Modulation & Coding](#)

LTE and WiMAX Satellite Systems: Improving FEC Performance Using Split Multicode Transmission

Adegbenga Awoseyila (University of Surrey, United Kingdom); Barry Evans (University of Surrey, Italy)
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Adaptive Coding and Modulation for Return Satellite Links Using Binary Turbo Coding

Stewart Crozier (Communications Research Centre, Canada); Ron Kerr (Communications Research Centre Canada, Canada); John Lodge (Communications Research Centre (CRC), Canada)
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Improving the Spectral Efficiency of FDM-CPM Systems Through Packing and Multiuser Processing

Amina Piemontese (University of Parma, Italy); Nicolò Mazzali (University of Parma, Italy); Giulio Colavolpe

(University of Parma, Italy)
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HD Video Broadcasting Using Scalable Video Coding Combined with DVB-S2 Variable Coding and Modulation

Patricia Inigo (EADS Astrium, France); Shpend Mirta (Fraunhofer Heinrich Hertz Institute, Germany); Cédric Le Guern (Assystem, France); Jérôme Tronc (EADS Astrium, France); Thomas Schierl (HHI, Germany); Cyrille Moreau (Astrium Satellites, Germany); Thomas Wiegand (Fraunhofer Institute for Telecommunications - Heinrich-Hertz-Institute, Germany)
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On the Performance of Moderate-Length Non-Binary LDPC Codes for Space Communications

Laura Costantini (University of Bologna, Italy); Balazs Matuz (German Aerospace Center (DLR), Germany); Gianluigi Liva (DLR (German Aerospace Center), Germany); Enrico Paolini (DEIS, WiLAB, University of Bologna, Italy); Marco Chiani (University of Bologna, Italy)
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Optimizing Cross Layer Coding Redundancy in Slow Fading Channels

Marco Papaleo (University of Bologna, Italy); Valeria Petrini (University of Bologna, Italy); Rosario Firrincieli (University of Bologna, Italy); Alessandro Vanelli-Coralli (University of Bologna, Italy); Giovanni Emanuele Corazza (University of Bologna, Italy)
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SAP1: System Architecture & Performance I

Multi-User Detection for Inmarsat's BGAN System

Michael Moher (Space-Time DSP, Canada)
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Satellite Delivery of Next Generation Broadband Access to the UK

Graham Peters (Avanti Communications Ltd, United Kingdom)
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Creating the Next Generation DVB-RCS Satellite Communication & Applications

Harald Skinnemoen (AnsuR Technologies, Norway)
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New Frontiers for the Mobile Satellite Interactive Services

Eros Feltrin (Eutelsat SA, France); Elisabeth Weller (Eutelsat SA, France)
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SatCom Systems in the Context of Future Internet-Enabled Smart Infrastructures

Nicolas Chuberre (Thales Alenia Space, France); Mauro Piccinni (Thales Alenia Space, Italy); Jean-François Boutillon (Thales Alenia Space, France); Angel Alvaro Sanchez (Thales Alenia Space, Spain); Juan Manuel Rodriguez Bejarano (Thales Alenia Space, Spain); Konstantinos P Liolis (Space Hellas S.A., Greece)
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AmerHis Next Generation Global IP Services in the Space

Ana Yun (Thales Alenia Space España, Spain); Isaac Moreno (Thales Alenia Space, Spain); Juan Manuel Rodriguez Bejarano (Thales Alenia Space, Spain); Oriol Casas (Thales Alenia Space España, Spain); Ana Jalon (Thales Alenia Space España, Spain); Ana Solano Ros (Thales Alenia Space, Spain); Borja de la Cuesta (Thales Alenia Space, Spain); Carla Salas (Thales Alenia Space, Spain); Ignacio Jimenez Lopez-Guarch (Thales Alenia Space España, Spain); Eduardo Rodriguez Perez (Thales Alenia Space España, Spain)
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16:30 - 18:30

EST: Estimation & Synchronization Theory

Code-Aware Joint Estimation of Carrier Phase and SNR for Linear Modulation Schemes

Michael Bergmann (Graz University of Technology, Austria); Wilfried Gappmair (Graz University of Technology, Austria); Harald Schlemmer (Joanneum Research, Austria); Otto Koudelka (Graz University of Technology,

Austria)
pp. 177-182

A New Simple Method Employing Phase Noise Estimation for OFDM Systems Over Multipath Fading Channel

Abdulhamid Zahedi (Islamic Azad University, kermanshah branch, iran, Iran); Mohammad Noroozi (Shahed University, Iran); Hamidreza Bakhshi (Shahed University, Iran); Mohammad javad Baniamerian (Islamic Azad University, kermanshah branch, iran, Iran)
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A Performance and Complexity Optimization of Joint Code and Frame Synchronization for DVB-S2/RCS Mobile

Giulio Gabelli (University of Bologna, Italy); Claudio Palestini (University of Bologna, Italy); Stefano Cioni (University of Bologna, Italy); Alessandro Vanelli-Coralli (University of Bologna, Italy); Giovanni Emanuele Corazza (University of Bologna, Italy)
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Modulation Classifier for Signals Used in Satellite Communications

Markus Flohberger (Graz University of Technology, Austria); Wilfried Gappmair (Graz University of Technology, Austria); Otto Koudelka (Graz University of Technology, Austria)
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Low Complexity Time-Domain Channel Estimation for OFDM Using Training Symbols

Mo Zhu (University of Surrey, United Kingdom); Adegbenga Awoseyila (University of Surrey, United Kingdom); Barry Evans (University of Surrey, Italy)
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Efficient Channel Equalization Technique for DVB-S2 Standard

Pansoo Kim (ETRI, Korea); Jaehee Han (Electronics and Telecommunications Research Institute, Korea); Dae-Ig Chang (Electronics and Telecommunications Research Institute, Korea); DeokGil Oh (Electronics and Telecommunications Research Institute, Korea)
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[MBC: Multibeam Communications](#)

Capacity Potential of Mobile Satellite Broadcasting Systems Employing Dual Polarization Per Beam

Pantelis-Daniel Arapoglou (National Technical University of Athens, Greece); Paolo Burzigotti (European Space Agency ESA/ESTEC, The Netherlands); Ana Bolea Alamañac (European Space Agency, The Netherlands); Riccardo De Gaudenzi (ESA, The Netherlands)
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Random, Deterministic, and Hybrid Algorithms for Distributed Beamforming

Ilaria Thibault (University of Bologna, Italy); Giovanni Corazza (University of Bologna, Italy); Lina Deambrogio (University of Bologna, Italy)
pp. 221-225

System Capacity Optimization in Time and Frequency for Multibeam Multi-Media Satellite Systems

Joan Manuel Cebrian (Indra Espacio, Spain); Maria-Angeles Vázquez-Castro (Universidad Autónoma de Barcelona, Spain); Zoltan Katona (DLR, Germany); Augustine Zanus (MDA Corporation, Canada); Nader Alagha (European Space Agency, The Netherlands); Lei Jiang (Universidad Autónoma de Barcelona, Spain)
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Subspace Interference Alignment for Multibeam Satellite Communications Systems

Paridhi Jain (The LNM Institute of Information Technology, India); Maria-Angeles Vázquez-Castro (Universidad Autónoma de Barcelona, Spain)
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A Novel Look Into Digital Beamforming Techniques for Multipath and Interference Mitigation in Galileo Ground Stations

José López Vicario (Universitat Autònoma de Barcelona, Spain); Marc Barcelo (UAB, Spain); Marti Mañosas (UAB, Spain); Gonzalo Seco-Granados (Universitat Autònoma de Barcelona, Spain); Felix Antreich (German Aerospace Center (DLR), Germany); Joan Manuel Cebrian (Indra Espacio, Spain); Joan Picanyol (Indra Espacio, Spain); Francisco Amarillo (ESA, The Netherlands)
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Beam Hopping in Multi-Beam Broadband Satellite Systems: System Simulation and Performance Comparison with Non-Hopped Systems

Javad Anzalchi (EADS Astrium, United Kingdom); Alan Couchman (EADS Astrium, United Kingdom); Piero Gabellini (Space Engineering S.p.a., Italy); Gennaro Gallinaro (Space Engineering S.p.A., Italy); Luciano D' Agristina (Space Engineering SpA, Italy); Nader Alagha (European Space Agency, The Netherlands); Piero Angeletti (European Space Agency, The Netherlands)
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SAP2: System Architecture & Performance II

Analysis of Interference Issues in Integrated Satellite and Terrestrial Mobile Systems

Vincent Deslandes (EADS Astrium, France); Jérôme Tronc (EADS Astrium, France); Andre-Luc Beylot (ENSEEIH, France)
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Portable Satellite Backhauling Solution for Emergency Communications

Angels Via Estrem (TriaGnoSys GmbH, Germany); Markus Werner (TriaGnoSys GmbH, Germany)
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An Automated Fire Detection and Alerting Application Based on Satellite and Wireless Communications

Konstantinos P Liolis (Space Hellas S.A., Greece); Spiros Pantazis (Space Hellas SA, Greece); Vasilis Gennatos (Space Hellas SA, Greece); Socrates Costicoglou (Space Hellas SA, Greece); Ilias Andrikopoulos (Space Hellas S.A., Greece)
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A Satellite Based System for Managing Crises Scenarios: the E-SPONDER Perspective

Maurizio Casoni (University of Modena and Reggio Emilia, Italy); Giorgio Calarco (University of Modena and Reggio Emilia, Italy); Alessandro Paganelli (University of Modena and Reggio Emilia, Italy); Dimitris Vassiliadis (Exodus S.A., Greece); Michal Wódczak (Telcordia Technologies, Inc., Poland)
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Overview of Platine Emulation Testbed and Its Utilization to Support DVB-RCS/S2 Evolutions

Cédric Baudoin (Thales Alenia Space, France)
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Satellite-Based Fully Distributed Mesh Hybrid Networking Technology DVB-S2/RCS-WiMAX for RRD Areas

Alexander Markhasin (Siberian State University of Telecommunications and Information Science, Russia)
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Wednesday, September 15

09:00 - 11:00

[Spectrum Sharing in the Future \(Panel\)](#)

11:20 - 13:00

[CC: Cooperative Communications](#)

Resource Allocation Mechanisms in Satellite Cooperative Systems

Rosalba Suffritti (University of Florence, Italy); Luca Simone Ronga (CNIT, Italy); Enrico Del Re (University of Florence, Italy)
pp. 301-308

Cooperative Satellite To Land Mobile Gap-Filler-Less Interactive System Architecture

Giuseppe Cocco (CTTC, Spain); Christian Ibars (Centre Tecnologic de Telecomunicacions de Catalunya - CTTC, Spain); Oscar Del Rio (ESTEC TOS-ETC, European Space Agency, The Netherlands)
pp. 309-314

Performance Assessment Based on Field Measurements of Mobile Satellite Services Over Hybrid Networks in

S-Bands

Orazio Pulvirenti (Eutelsat SA, France); Alessandro Del Bianco (DLR, Germany); David Ortiz (Sidsa, Spain); Simon Sudler (Fraunhofer-IIS, Germany); Reiner Hoppe (AWE Communications, Germany); Massimo PannoZZo (Callearo Antenne S.p.A., Italy)
pp. 315-324

An Enhanced Cooperative Transmit Diversity in Integrated MSS Systems

Hee Wook Kim (Electronics and Telecommunications Research Institute, Korea); Do-Seob Ahn (Electronics and Telecommunications Research Institute, Korea); Kunseok Kang (ETRI, Korea); Bon-Jun Ku (Electronics and Telecommunications Research Institute, Korea)
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SER Analysis of Cooperative Satellite-Terrestrial Network Over Non Identical Fading Channels

Arif Iqbal (Asian Institute of Technology, Thailand); Kazi. M. Ahmed (Asian Institute of Technology, Thailand)
pp. 329-334

NP: Navigation & Positioning

Improved GNSS Positioning Exploiting a Vehicular P2P Infrastructure

Marco Rao (Università di Palermo, Italy); Letizia Lo Presti (Politecnico di Torino, Italy); Jaron Samson (European Space Agency, The Netherlands)
pp. 335-342

Parallel PN Code Acquisition for Wireless Positioning in CDMA Handsets

Guido De Angelis (University of Perugia, Italy); Giuseppe Baruffa (University of Perugia, Italy); Saverio Cacopardi (University of Perugia, Italy)
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Wideband, High Gain, High Linearity, Low Noise Amplifier for GNSS Frequencies with Compensation for Low Frequency Instability

Sarang Thombre (Tampere University of Technology, Finland); Heikki Hurskainen (Tampere University of Technology, Finland); Jari Nurmi (Tampere University of Technology, Finland)
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State of the Art Review for Automotive Satellite Antennas

Massimo PannoZZo (Callearo Antenne S.p.A., Italy); Mario Busa (Callearo Antenne S.p.A., Italy); Enrico Toniolo (Callearo Antenne S.p.A., Italy); Luca Salghetti (European Space Agency-ESTEC, The Netherlands); Daniel Zamberlan (Callearo Antenne S.p.A., Italy)
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A Joint Carrier and Data Estimation Scheme for Real-Time High Dynamics GNSS Receivers

Pedro A. Roncagliolo (Universidad Nacional de La Plata, Argentina); Javier G García (Universidad Nacional de La Plata, Argentina); Carlos Muravchik (Universidad Nacional de La Plata, Argentina)
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SP: Signal Processing

On Mean Revisit Frequency of Non-Repeating Satellite Orbits with Finite Sensor Range

Zoltan Katona (German Aerospace Center, Germany)
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Optimal Linear Prediction of Rain Attenuation Using the Maseng-Bakken Model

Jean-Yves Tourneret (University of Toulouse, France); Corinne Mailhes (University of Toulouse, France); Zakariya Faraj (Thales Alenia Space, France)
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Blind Source Separation of Hyperspectral Images in DCT-Domain

Emna Karray (LTSIRS, Tunisia); Naceur Mohamed Saber (Ecole National d'Ingénieurs de Tunis, Tunisia); Med Anis Loghmari (Ecole National d'Ingénieurs de Tunis, Tunisia)
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Performance Analysis of Distributed Tracking with Consensus on Noisy Time-Varying Graphs

Yongxiang Ruan (University of New Mexico, USA); Sudharman K Jayaweera (University of New Mexico, USA); Carlos Mosquera (Universidad de Vigo, Spain)
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3-D Gaussian Scatter Density Propagation Model Employing a Directional Antenna At BS

Junaid Nawaz Syed (Muhammad Ali Jinnah University, Islamabad, Pakistan); Mohammad N Patwary (Staffordshire University, Stafford, United Kingdom); Noor M. Khan (Muhammad Ali Jinnah University, Islamabad, Pakistan); Hongnian Yu (Staffordshire University, Stafford, United Kingdom)
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14:30 - 16:50

CT: Communication Theory

Direct Spectrum Division Transmission for Highly Efficient Satellite Communications

Jun-ichi Abe (Nippon Telegraph and Telephone Corporation, Japan); Fumihiro Yamashita (NTT corporation, Japan); Kiyoshi Kobayashi (NTT Access Network Service Systems Laboratories, NTT Corporation, Japan)
pp. 401-406

Optimized APSK Bit Allocation for Satellite Communications

Antonio Angioi (University of Cagliari, Italy); Marco Lixia (University of Cagliari, Italy); Maurizio Murrone (University of Cagliari, Italy)
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Prediction of Performance of the DVB-SH System Relying on Mutual Information

Caroline Amiot-Bazile (CNES, France); Chauvet Wilfried (Telecommunications for Space and Aeronautics, France); Jerome Lacan (ISAE, France)
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Uniform Circular Arrays: the Key to Optimum Channel Capacity in Mobile MIMO Satellite Links

Vito Dantona (Universität der Bundeswehr München, Germany); Robert T Schwarz (Fed. Office of the Bundeswehr for Information Technology, Germany); Andreas Knopp (Fed. Office of the Bundeswehr for Information Technology, Germany); Berthold Lankl (Munich University of the German Armed Forces (Bundeswehr), Germany)
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Use of Adaptive Coding and Modulation for Aeronautical Communications

Katia Leconte (Thales Alenia Space, France); Nicolas Van Wambeke (Thales Alenia Space, France); Hugo Gonzalez Perez (CNES, France)
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Rotation Invariant Subcarrier Mapping: a Novel Technique Enabling Quasi-Constant OFDM Envelope

Stefano Rosati (University of Bologna, Italy); Enzo Alberto Candreva (University of Bologna, Italy); Giovanni Emanuele Corazza (University of Bologna, Italy)
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A Tighter Upper Bound on the Error Probability of Signals in White Gaussian Noise

Enzo Alberto Candreva (University of Bologna, Italy); Giovanni Corazza (University of Bologna, Italy)
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NetP: Network Protocols

Overhead Estimation of Selected Protocols for File Transfer

Muhammad Muhammad (DLR (German Aerospace Center), Germany); Matteo Berioli (German Aerospace Center (DLR), Germany)
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Performance of Database Synchronization Algorithms Via Satellite

Chen Tang (DLR, Germany); Anton Donner (German Aerospace Center (DLR), Germany); Javier Mulero Chaves (DLR, Germany); Muhammad Muhammad (DLR (German Aerospace Center), Germany)
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An Innovative Optimal Approach to Slotted-ALOHA Random Access Protocol

Antonio Pietrabissa (Università di Roma La Sapienza, Italy); Andrea Fiaschetti (University of Rome "La Sapienza", Italy)
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Adding Different Levels of QoS to the DVB-SH Standard

Aharon Vargas (Fraunhofer Institute for Integrated Circuits (IIS), Germany); Marco Breiling (Fraunhofer IIS, Germany); Wolfgang Gerstacker (University of Erlangen-Nuernberg, Germany); Holger Stadali (Fraunhofer IIS, Germany); Ernst Eberlein (Fraunhofer Institute of Integrated Circuits, Germany); Albert Heuberger (Technische Universität Ilmenau, Germany)
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Enhancing TCP Based Communications in Mobile Satellite Scenarios: TCP PEPs Issues and Solutions

Emmanuel Dubois (CNES, France); Julien Fasson (University of Toulouse - IRIT - INPT/ENSEEIH, France); Christophe Donny (Cnes, France); Emmanuel Chaput (IRIT-ENSEEIH, France)
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Impact of ROHC on IP Encapsulation Efficiency in a DVB-S2 GSE-Only Transmission System

Nikhil Ninan (University of Aberdeen, United Kingdom); Nimbe L Ewald (University of Aberdeen, United Kingdom); Gorry Fairhurst (University of Aberdeen, United Kingdom)
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GSSTP: a Signalling Transport Protocol for DVB-S2 GSE-Only Transmission Systems

Nimbe L Ewald (University of Aberdeen, United Kingdom); Gorry Fairhurst (University of Aberdeen, United Kingdom); Michael Noisternig (University of Salzburg, Austria); Thomas Soboll (University of Salzburg, Austria); Ana Yun (Thales Alenia Space España, Spain); Isaac Moreno (Thales Alenia Space, Spain)
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SBS: S-Band Systems

Channel Measurement Equipment for Mobile Propagation Channel: Measurements in a Hybrid DVB-SH Pilot Network

Frank Burkhardt (Fraunhofer IIS, Germany); Thomas Heyn (Fraunhofer IIS, Germany); Juan Rivera Castro (ESA, The Netherlands); Ernst Eberlein (Fraunhofer Institute of Integrated Circuits, Germany); Albert Heuberger (Technische Universität Ilmenau, Germany)
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Sirius XM Satellite Radio System Overview and Services

Stefano DiPierro (Sirius XM Radio, USA); Riza Akturan (Sirius XM Radio, USA); Richard Michalski (Sirius XM Radio, USA)
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Multihop Transmission with Interference Using Spatial Reused Space-Time Coded Cooperative-Routing

Behrouz Maham (University of Oslo, Norway); Are Hjørungnes (University of Oslo, Norway); Zhu Han (University of Houston, USA)
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Perspectives on Mobile Satellite Services in S-Band

Antonio Arcidiacono (Eutelsat, France); Daniele V. Finocchiaro (Eutelsat S.A., France); Sebastien Grazzini (Eutelsat SA, France); Orazio Pulvirenti (Eutelsat SA, France)
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Mutual Interference Between DVB-SH and UMTS

Martina Angelone (MBI s.r.l., Italy); Luigi Cuseo (MBI s.r.l, Italy); Marco Andrenacci (MBI, Italy); Sabino Titomanlio (MBI s.r.l., Italy)
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DVB-SH Field Trials Measurements Results

Michel Cohen (Alcatel-Lucent, France); Jean-Marc Hanriot (Alcatel Lucent, France); Gerard Pousset (Dibcom, France); Christian Le Floch (Alcatel-Lucent Mobile Broadcast, France); Stephen Wilkus (Alcatel-Lucent, USA)
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System Design for Pan-European MSS Services in S-Band

Sandro Scalise (DLR (German Aerospace Center), Germany); Cristina Parraga Niebla (German Aerospace

Center (DLR), Germany); Gennaro Gallinaro (Space Engineering S.p.A., Italy); Marco Breiling (Fraunhofer IIS, Germany); Joan Manuel Cebrian (Indra Espacio, Spain); Marco Andrenacci (MBI, Italy); Rita Rinaldo (ESA, The Netherlands); Oscar Del Rio (ESTEC TOS-ETC, European Space Agency, The Netherlands); Daniele V. Finocchiaro (Eutelsat S.A., France); Gerald Schlüter (SES Astra, Luxemburg)
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