

| June 15 WEDNESDAY | | | June 16 THURSDAY | | | June 17 FRIDAY | | |
|--|---|--|---|--|--|--|--|--|
| OPENING CEREMONY (8:30 - 9:00) Conference Chair Welcome Broadcast Technology Society President Welcome Welcome to the University of the Basque Country | | | | | | CONFERENCE CHAIR FINAL REPORT & BMSB 2023 ANNOUNCEMENT (8:45 - 9:00) | | |
| KEYNOTES - ROOM "BAROJA" (9:00 - 11:00) | | | KEYNOTES - ROOM "BAROJA" (9:00 - 11:00) | | | KEYNOTES - ROOM "CHILLIDA" (9:00 - 11:00) | | |
| Samina Husain (BTS) The Relevance, Resilience, and Role of Broadcast Television ATSC 3.0 Adoption and Evolution New DVB solutions for a time of transition | | | Gabriel Miro-Muntean (DCU) Can We Support High Quality Rich Media Content when Delivered in Current Network Environment? Ana García-Armada (UCI) From Mobile Multimedia Broadcasting to the Tactile Internet | | | Mikel Zorrilla (Vicomtech) Orchestration of next-generation XR media services Jordi Joan Giménez (EBU-SGMAG) 5G Media Production: More than replacing some modems | | |
| COFFEE BREAK - ROOM "CHILLIDA" (11:00 - 11:30) | | | COFFEE BREAK - ROOM "CHILLIDA" (11:00 - 11:30) | | | COFFEE BREAK - ROOM "CHILLIDA" (11:00 - 11:30) | | |
| PARALLEL SESSIONS 1A (11:30-12:50) Room: "BAROJA" ATSC | PARALLEL SESSIONS 1B (11:30-12:50) Room: "ARRIAGA" MULTIMEDIA I | PARALLEL SESSIONS 1C (11:30-12:50) Room: "LABOA" FUTURE DTT | PARALLEL SESSIONS 4A (11:30-12:50) Room: "BAROJA" QoS/QoE | PARALLEL SESSIONS 4B (11:30-12:50) Room: "ARRIAGA" 5G | PARALLEL SESSIONS 4C (11:30-12:50) Room: "LABOA" VIDEO PROCESSING | PARALLEL SESSIONS 7A (11:30-12:50) Room: "BAROJA" PRODUCTION | PARALLEL SESSIONS 7B (11:30-12:50) Room: "ARRIAGA" AI & SIGNAL PROCESSING | PARALLEL SESSIONS 7C (11:30-12:50) Room: "LABOA" SECURITY & PRIVACY IN MULTIMEDIA |
| Paper: 14 - Fred Engel - ATSC 3.0 as a Use Case for Public Safety Communications Paper: 18 - Hojoon Jung - Core-Layer Performance Comparison of ATSC 3.0 LDM-MIMO System in Mobile Environment Paper: 79 - Seok-Ki Ahn - Improvement of L1 Signaling Protection Based on ATSC 3.0 LDPC Codes Paper: 58 - Haechan Kwon - Laboratory tests for ATSC 3.0-centric combination of cross-polarized MIMO and LDM with varying XPs Paper: 136 - Eneko Iradier - Signal Isolation in Full-Duplex Inter-Tower Communication Networks: Field Trials | Paper: 13 - Mohammed Amine Togou - An Elastic DASH-based Bitrate Adaptation Scheme for Smooth On-Demand Video Streaming Paper: 22 - Abid Yaooob - Flexible Tiles in Adaptive Viewing Window: Enabling Bandwidth-Efficient and Quality-Optimized 360° VR Video Streaming Paper: 17 - Matteo Anedda - Targeted Advertisement in HbbTV Multimedia Contents Paper: 32 - Yining Feng - Adaptive Video Streaming Based on Learning Intrinsic Reward Paper: 67 - Han Qin - Temporally Dependent Rate-Distortion Optimization for AV1 Encoder | Paper: 134 - Rufino Cabrera - Opportunistic PLP: Maximizing the Spectrum Usage in DTT Paper: 4 - Zhihong Hong - Blind RF Self-Interference Cancellation for In-Band Distribution Link in ATSC 3.0 Paper: 12 - Kotoko Furuya - Verification of Low-Latency Channel for Advanced ISDB-T Paper: 56 - Scholastique Aizo - Applying ATSC 3.0 NUC-2D constellations to DVB-T2: an improved performance case study Paper: 21 - Guozhi Chen - Minimizing Age of Synchronization in No-buffer Wireless Networks with Random Arrivals | Paper: 118 - Yashar Farzaneh Yeznabad - Backhaul Traffic and QoE Joint Optimization Approach for Adaptive Video Streaming in MEC-Enabled Wireless Networks Paper: 62 - Roberto Puddu - An open source satellite network simulator for quality based multimedia broadband traffic management Paper: 29 - Huiyu Duan - Augmented Reality Image Quality Assessment Based on Visual Confusion Theory Paper: 133 - Anderson Simulcua - An Evaluation of 360° Video and Audio Quality in an Artistic-Oriented Platform Paper: 38 - Angel Martin - Adaptive QoS of WebRTC for Vehicular Media Communications | Paper: 116 - Yu Xue - 5G System Level Simulation Calibration Using MATLAB 5G Toolbox Paper: 110 - Álvaro Ibanez Latorre - 5G Broadcast Open source platforms Paper: 46 - Ernesto Fontes Pupo - Dynamic Multicast Access Technique in SC-PTT 5G Networks: Subgrouping with OM/COM Paper: 37 - Devanshu Anand - A Machine Learning Solution to Mitigate Co-Tier Interference in 5G HetNets and Improve QoE for Video Delivery Paper: 49 - Chunyi Li - A PBCH Reception Algorithm in 5G Broadcasting | Paper: 132 - Vinh Van Duong - LFDNET: Light Field Depth Estimation Network Based on Hybrid Data Representation Paper: 33 - Takeshi Kajiyama - Sign-language image dataset with a hand pose type attribute Paper: 69 - Shih Yu Chang - Novel Extended Kalman Filter Using Matrix-Based Levenberg-Marquardt Algorithm and Its Application for Variable Bit-Rate Video Frame-Size Prediction Paper: 119 - Guannan Liu - Automatic Human Posture Recognition Using Kinect Sensors by Advanced Graph Convolutional Network Paper: 130 - Qianqian Chen - Facial Expression Recognition Based on a Lightweight CNN Model | Paper: 112 - Jan Dürre - A Disaggregated 5G Testbed for Professional Live Audio Production Paper: 84 - Adrián Rodrigo - A Multiple Camera 5G Wireless Studio for Professional Content Production Scenarios Paper: 54 - Mikel Zorrilla - Experimenting with distributed participatory performing art experiences Paper: 150 - Eduardo Salz - VOD2Live: Exploring the technical challenges in the adaptive generation of linear FAST channels from existing on-demand and live contents and personalised ad selection. Paper: 88 - Rodrigo Ribeiro de Oliveira - Digital TV Based Sign Language Avatar | Paper: 138 - Iligo Bilbao - AI-based Inter-Tower Communication Networks: First approach Paper: 89 - Hyeonseok Kim - A DNN-Based Channel Estimation Scheme for PMCH in LTE-Based 5G Terrestrial Broadcast System Paper: 42 - Daniel Pereira-Ruiz Sánchez - Joint Optimization of IRS-assisted MU-MIMO Communication Systems through a DRL-based Twin Delayed DDPG Approach Paper: 43 - Darian Pérez-Adán - Alternating Minimization Algorithm for Multiscale RIS-assisted MIMO Systems Paper: 31 - Yue He - Parameters Optimization for Impulse Noise Suppressing: A Deep Learning Based Approach | Paper: 85 - Ziqi Liu - Visible light fingerprinting communication devices for enhancing ATSC 3.0 service Cyber Security Paper: 53 - Qian Wang - Novel Multiscale-based LPC Random Forest Classifier for Bluetooth RF-Fingerprint Identification Paper: 34 - Viad Popescu - Blockchain-Based Recommendation and Advertisement System for the TV Ecosystem Paper: 101 - Md. Sapon Miah - Machine Learning-based Malicious Users Detection in Blockchain-Enabled CR-IoT Network for Secured Spectrum Access Paper: 128 - Jun Yin - Customized 5G Private Network Solution of High Flexibility, Security and Controllability |
| LUNCH (13:15 - 14:45) | | | LUNCH (13:15 - 14:45) | | | LUNCH (13:15 - 14:45) | | |
| PARALLEL SESSIONS 2A (14:45 - 16:05) Room: "BAROJA" FUTURE DTT II | PARALLEL SESSIONS 2B (14:45 - 16:05) Room: "ARRIAGA" FIELD TRIALS | PARALLEL SESSIONS 2C (14:45 - 16:05) Room: "LABOA" MULTIMEDIA II | PARALLEL SESSIONS 5A (14:45 - 16:05) Room: "BAROJA" BEYOND 5G | PARALLEL SESSIONS 5B (14:45 - 16:05) Room: "ARRIAGA" AI & NETWORKS | PARALLEL SESSIONS 5C (14:45 - 16:05) Room: "LABOA" SIGNAL PROCESSING | End of Conference Day 3 | | |
| Paper: 55 - Fadi Jerji - Designing Non-Uniform Constellations using an Artificial Immune System Paper: 86 - Julio Omi - Performance Analysis of TV 3.0 Over-the-Air Physical Layer Protocols Paper: 115 - Yu Xue - Combining LDM and MIMO for Mixed Broadcast-Broadband Service Delivery Paper: 94 - Allan Chaubet - Analysis of the Transport Layer Candidate Technologies for the TV 3.0 Project Paper: 66 - Lorenzo Fanari - Channel Coding for the Control Plane in Broadcast Networks | Paper: 11 - Marta Fernández - Empirical Analysis of Time Variability of Electromagnetic Exposure due to Mobile Communications Paper: 59 - Sungjun Ahn - Empirical Modeling of UHF Wireless Channel in HPHT SFNs: Based on Seoul Metropolitan Case Paper: 90 - Sungho Jeon - Nationwide Integrated 24/7 Monitoring System for ATSC 3.0 Single Frequency Broadcast Network Paper: 57 - Dreyelan Morejón - Cost efficient spectrum monitoring platform for advanced management and optimization of wireless systems Paper: 82 - Yong Zhao - Latency Analysis and Field Trial for 5G NR | Paper: 35 - Roberto Viola - Assessment of the effects of 5G MEC cache on DASH adaptation algorithms Paper: 27 - Chetna Singhal - EVB360: Efficient 360-Degree Video Broadcast in Next-Generation Cellular Networks Paper: 78 - Mengying Liu - Subjective quality assessment of one-to-one videotelephony services Paper: 167 - Torbjørn Einarsson - Elastic Frame Protocol - an open-source alternative to MPEG-2 TS Paper: 7 - Yun Zhou - Efficient Network Utilizing Feature Redundancy for Single Image Super-Resolution | Paper: 63 - Federica Rinaldi - Impact of Satellite Mobility on the Delivery of Multimedia Services over LEO-based NTN Paper: 64 - Chiara Suraci - A Trust-Based Selection Mechanism for the Support of 6G eHealth Multimedia Services Paper: 44 - Jungsun Um - Impact of Multiple Transmissions using Incremental Redundancy for 5G-MBS Paper: 40 - Mohammad Fardad - A Fast and Effective Graph-Based Resource Allocation and Power Control Scheme in Vehicular Network Slicing Paper: 129 - Yiqin Liu - Toward Native Artificial Intelligence in 6G | Paper: 47 - Claudia Carballo González - Deep Reinforcement Learning for Dynamic Radio Access Selection over Future Wireless Networks Paper: 114 - Matteo Anedda - A Machine Learning-based Approach for Vehicular Tracking in Low Power Wide Area Networks Paper: 172 - Guoqing Xia - Deep Reinforcement learning-Based Dynamic Beamforming and power allocation in Uplink Cell-Free MIMO Network Paper: 41 - Yosvany Hervis Santana - Radio Environment Map of an LTE Deployment Based on Machine Learning Estimation of Signal Levels Paper: 73 - Liang Qiang - Federated Reinforcement Learning-Based Radio Resources Scheduling for Short Video Applications | Paper: 107 - Guillermo Díaz - Channel phase calibration based on a Savitzky-Golay filter in time-domain for OFDM systems Paper: 6 - Zhihong Hong - MIMO Integration for Wireless Backhaul and Inter-Tower Communications in ATSC 3.0 Paper: 5 - Junghwan Kim - Analysis of High Rate Punctured Trellis Coded M-PSK for Multimedia Data Transmissions Paper: 19 - Guoyu Hao - Novel OAM-Based MIMO System Using Fractional Mode Paper: 24 - Lalwei Luo - A Novel Blind Compensation Scheme for I/Q Imbalance of Wideband Zero-IF Transmitter. | | | |
| COFFEE BREAK - ROOM "CHILLIDA" (16:05-16:30) | | | COFFEE BREAK - ROOM "CHILLIDA" (16:05-16:30) | | | COFFEE BREAK - ROOM "CHILLIDA" (16:05-16:30) | | |
| POSTER SESSION 3D - ROOM "CHILLIDA" (16:30 - 17:30) | | | POSTER SESSION 6D - ROOM "CHILLIDA" (16:30 - 17:30) | | | POSTER SESSION 6D - ROOM "CHILLIDA" (16:30 - 17:30) | | |
| Paper: 1 - Xiaoyin Zhao - Multi independent logical cells under 5G Radio Access Network Sharing of mobile operators Paper: 2 - Jingyu Cao - Hiding Among Your Neighbors: Face Image Privacy Protection with Differential Private k-anonymity Paper: 3 - Xiao Li - Research on 5G Shared Network Access Residency Strategy Paper: 8 - Chenghao Lei - Cost and QoS Balanced Service Function Graph Scaling Algorithm for Cloud-Edge Collaborative Multimedia IoT Paper: 9 - Shi Wang - Risk-Aware Computation Offloading and Resource Allocation for Multimedia Services in F5W HetNets Paper: 10 - Bowen Gao - Network Traffic Classification Based on Domain Adaptive Migration for Multimedia Services in Smart City Networks Paper: 15 - Xiaohao Mo - Wideband Sparse Spectrum Sensing With the Virtual Grid Model Paper: 18 - Xinyue Zhao - An Intelligent Mining Method of Alarm Knowledge Based on Multimedia Software-defined Network Paper: 23 - Xinyu Hou - Information Directed Learning Algorithm for Minimizing the Queue Length Paper: 25 - Yuxiao He - Scheduling Algorithms for Minimizing the Age of Synchronization in Wireless Networks with Random Updates under Throughput Constraints | Paper: 26 - Peiyi Zhao - On Bit Mapping for Golden Angle Modulation in the Presence of Strong Phase Noise Paper: 30 - Wei Sun - Blind Quality Assessment for In-the-Wild Images via Hierarchical Feature Fusion Strategy Paper: 39 - Fengshuang Li - An Optimal Block-Scheduling Algorithm for Pipelined Block-Parallel LDPC Decoder Paper: 45 - Mingshi Wen - Failure Prediction Based VNF Migration Mechanism for Multimedia Services in Power Grid Substation Monitoring Paper: 151 - You Zhou - On Energy Cyclic Replenishment of Combined UAV for Live Broadcast Paper: 52 - Shenyang Zhu - Wireless Channel Recognition by CNN Paper: 60 - Wei Liu - Real-Time Intelligent Machine-Vision Assisted Industrial-Informatics System Paper: 61 - Jinkyu Kang - Wireless Self-Energy Recycling for Unmanned Aerial Vehicle-based Terrestrial Broadcasting Paper: 65 - Yuri Batov - High Power Amplifier Nonlinearity Models and Digital Predistortion Techniques in DVB-S2X Paper: 68 - Yujie Yan - Trustworthiness Measurement for Multimedia Domain Knowledge Graph | Paper: 70 - Peng Yu - Active Cell Outage Detection Algorithm for Broadband Services in 5G Cloud Radio Access Networks Paper: 71 - Analysis and Implementation of MIMO Antenna Miniaturization Paper: 72 - Ye Wang - Design and Implementation of Traffic Scheduling Algorithm for Time-Sensitive Network Paper: 74 - Xinwu Hou - Joint Parameterized Resource Allocation for IAB Networks with Deep Reinforcement Learning Paper: 75 - Jia Hou - Extend Abstract: Coverage Requirements Analysis of 5G Voice Services Paper: 76 - Xiaobo Li - Dynamic Traffic Anomaly Detection for Broadband Smart Grid Services in Software Defined Networks Paper: 80 - Jinyang Yu - Research on Coverage and Capacity of 5G vGNR Paper: 81 - Xiaohang Xu - Interleaved Floor MIMO Solution in 5G Indoor System Paper: 83 - Fan Hong - Deep Reinforcement Learning based Mode Selection and Power Allocation Scheme for Convergent Power-Efficient Network Paper: 87 - Han Guo - Research on Handover Technology in 5G NSA and SA Hybrid Network | Paper: 91 - Zhirong Zhang - Intelligent Energy Saving Technology and Strategy of 5G RAN Paper: 93 - Zhiyan Chen - Sparse factor graph based expanded iterative detection and decoding scheme for uplink polar coded SCMA system Paper: 95 - Nannan Li - Physical Layer Key Generation Scheme for Wideband Large Antenna Array Systems Paper: 96 - Xiangjin Jiang - Mapping Design based on Diversity Effect for Polar Coded Modulation Paper: 97 - Pingping Lin - Research on Carrier Aggregation of 5G NR Paper: 99 - Yuebo Li - Q-learning based spectral hole detection with adaptive sampling point and sensing threshold for broadcasting services Paper: 100 - Jiawu Miao - CNN-based idle spectrum detection for 5G broadcasting services Paper: 102 - Zexuan Jing - Signal Interference Elimination Based on Autocoder for Integrated Sensing and Communication Paper: 104 - Hongjun Ye - SNR estimation based on CNN and LSTM in Broadcasting channel Paper: 106 - Yutong Wang - Fine-grained object tracking system infrastructure based on cloud-edge collaboration | Paper: 108 - Bingyang Han - Slice Deployment Method for Deterministic Latency Broadband Services for Virtual Power Plant Paper: 109 - Qunhong Zheng - 5G and P5G Converged Network Architecture for Fusion System of Video and 3D Model in Intelligent Park Paper: 111 - Zhiqiang Xu - MARL-Based Joint computation offloading and UAV deployment in MEC systems Paper: 113 - Shuo Yang - Resource Reservation for Graph-structured Multimedia Services in Computing Power Networks Paper: 120 - Yun Shen - A QoE-driven Adaptive Transmission Scheme for Streaming Media Service Paper: 121 - Peng Ding - Edge-to-Cloud Intelligent Vehicle-Infrastructure Based on 5G Time-Sensitive Network Integration Paper: 123 - Hongmei Zhu - Integrating MEC Application Slice with Network Slice in 5G Paper: 124 - Bo-mi Lin - Performance Evaluation of Preamble with TxID of ATSC 3.0 Paper: 125 - Yuwei Shan - Blockchain-Based Distributed Addressing for Initial Authentication in Future Network Paper: 126 - Lu Guo - An Algorithm of Emotion Recognition And Valence of Drivers on Multimodal Data | Paper: 127 - Song Yaqi - Multimedia Analytics on Air-assisted Vehicle Network in Smart City Paper: 131 - Junsheng Mu - Intelligent fusion scheme of broadcasting signal and sensing signal Paper: 137 - Zhou Yuetian - Application of MOPSO Algorithm to Optimization of Energy Efficiency and Spectral Efficiency Trade-off in Massive MIMO System Paper: 141 - Ming Wu - Practical Batch Quality Trend Analysis Based on Regression Algorithms Paper: 142 - Zhaozhen Zeng - Design of Smart Production Scheduling Using Computational Heuristic Intelligence Paper: 143 - Haoyong Li - Reinforcement Learning Based Encoder-Connected Congestion Control for Real-time Communication Paper: 171 - Shasha Zhang - A Fast Multi-Type-Tree split decision algorithm of intra Coding Unit in VVC Paper: 173 - Run Ma - DQL-based Wide-area path scheduling for deterministic time-delay broadcast services in power communication data networks | | | |
| End of Conference Day 1 | | | End of Conference Day 2 | | | | | |