



IEEE LATINCOM™

FULL PROGRAM

30 November–2 December 2022 // Rio de Janeiro, Brazil

***All times are BRT (GMT-3)**

Time/Room	November 30, 2022			December 1, 2022				December 2, 2022			
	Room 1	Room 2	Room 3	Room 1	Room 2	Room 3	Room 4	Room 1	Room 2	Room 3	Room 4
9:00-9:30	Opening ceremony and Registration			Registration				Registration			
9:30-11:00	YP Session	Tutorial 1	Tutorial 2	Keynote 2 – Israat Haque, Dalhousie University				Keynote 4 – Jussara Almeida, UFMG			
11:00-11:30	Coffee-break			Coffee-break				Coffee-break			
11:30-13:00	YP Session	Tutorial 1	Tutorial 2	Technical Session 1	Technical Session 2	Technical Session 3	Technical Session 4	Technical Session 13	Technical Session 14	Technical Session 15	Technical Session 16
13:00-14:30	Lunch			Lunch				Closing session			
14:30-16:00	Keynote 1 – Fabrizio Granelli, Univ. of Trento			Keynote 3 – Tommaso Melodia, Northeastern University				Special Lunch with World Cup Match			
16:00-16:30	Coffee-break			Coffee-break							
16:30-18:00	WICE Session	Tutorial 3	Tutorial 4	Technical Session 5	Technical Session 6	Technical Session 7	Technical Session 8				
18:00-18:15	Networking break			Networking break							
18:15-19:45	WICE Session	Tutorial 3	Tutorial 4	Technical Session 9	Technical Session 10	Technical Session 11	Technical Session 12				

November 30, 2022

Opening ceremony and Registration

Tutorials

Tutorial 1: Feature Extraction leveraging Programmable Data Planes for Traffic Analysis based on Machine Learning

Sergio Gutierrez (Universidad Autónoma Latinoamericana, Colombia), Juan Felipe Botero (University of Antioquia, Colombia), Adrian Lara (University of Costa Rica, Costa Rica)

Room 2 (Parati 2), Wednesday, November 30, 2022 – 9:30-13:00 (BRT)

Tutorial 2: Malware Analysis and Detection

Ashu Sharma (WatchGuard, India), Hemant Rathore (BITS Pilani, K K Birla Goa Campus, India)

Room 3 (Parati 3), Wednesday, November 30, 2022 – 9:30-13:00 (BRT)

Workshops

Young Professionals (YP)

Topic	Speaker	Timing (BRT)
Welcome and speaker's presentation	Dr. Pedro Cruz	9:30h – 9:40h
Research and innovation toward network evolution for future applications	Dr. Dianne Scherly Varela de Medeiros	9:40h – 10:20h
Opportunities for Research & Development in Digital Healthcare	Dr. Débora Christina Muchaluat-Saade	10:20h – 11:00h

Coffee-break		11:00h – 11:30h
Data Science in Navi's Investment Process	Antonio Lobato	11:30h – 12:15h
YP Networking session		12:15h – 13:00h

Keynotes

Keynote 1: Prof. Fabrizio Granelli (**University of Trento, Italy**)

Energy efficient networks & computing at the network edge

Parati 1+2+3, Wednesday, November 30, 2022 – 14:30-16:00 (BRT)

Tutorials

Tutorial 3: Evolution of NOMA Toward Next Generation Multiple Access

Zhiguo Ding (University of Manchester, United Kingdom), Yuanwei Liu (Queen Mary University of London, United Kingdom)

Room 2 (Parati 2), Wednesday, November 30, 2022 – 16:30-19:45 (BRT)

Tutorial 4: Machine Learning for CPS Security: Limitations and Novel Attack Discovery Techniques

Chuadhry Mujeeb Ahmed (University of Strathclyde, United Kingdom), Muhammad Azmi Umer (DHA Suffa University, Pakistan)

Room 3 (Parati 3), Wednesday, November 30, 2022 – 16:30-19:45 (BRT)

Workshops

Women In Communications Engineering (WICE)

Topic	Speaker	Timing (BRT)
Welcome and speaker's presentation	Dr. Yessica Sáez	16:30h – 17:00h
Increasing the participation of women and minorities in STEM at a large metropolitan university	Dr. Damla Turgut	17:00h – 17:45h
Status and challenges for 5G deployments in Latin America	Dr. Gidy Florez	17:50h – 18:35h
Questions from Audience & Short promotion of WICE benefits	Dr. Damla Turgut, Dr. Gidy Florez and Dr. Yessica Sáez	18:35h – 19:30h
WICE Networking session		19:30h – 20:30h

December 1, 2022

Keynotes

Keynote 2: Prof. Israat Haque (**Dalhousie University, Canada**)

Innovating in computer networks one data-plane program at a time

Parati 1+2+3, Thursday, December 1, 2022 – 9:30-11:00 (BRT)

Technical Sessions

TS1: Mobile and Wireless Networks

Room 1 (Parati 1), Thursday, December 1, 11:30-13:00 – Chair: José Marcos Nogueira (UFMG)

A probabilistic Grant Free scheduling model to allocate resources for eXtreme URLLC applications

Suyong Eum (Osaka University – Japan), Shin'ichi Arakawa (Osaka University – Japan), Masayuki Murata (Osaka University – Japan)

Deep Reinforcement Learning and Graph Neural Networks for Efficient Resource Allocation in 5G Networks

Martin Randall (Universidad de la República – Uruguay), Federico Larroca (Universidad de la República – Uruguay), Pablo Belzarena (Universidad de la República – Uruguay), Pedro Casas (AIT Austrian Institute of Technology – Austria)

Rate-Splitting Multiple Access Networks Assisted by Aerial Intelligent Reflecting Surfaces

Brena Lima (Lusofona University of Lisbon – Portugal), Rui Dinis (Instituto de Telecomunicações – Portugal), Daniel da Costa (Technology Innovation Institute – UAE), Marko Beko (Lusofona University – Portugal), Rodolfo Oliveira (Universidade Nova de Lisboa – Portugal), Rui Vigelis (Universidade Federal do Ceará – Brazil), Merouane Debbah (Technology Innovation Institute – UAE)

PyWiCh: Python Wireless Channel Simulator

Pablo Belzarena (Universidad de la República – Uruguay)

TS2: Communications and Information Security

Room 2 (Parati 2), Thursday, December 1, 11:30-13:00 – Chair: Célio Albuquerque (UFF)

A Hybrid CNN-LSTM Model for IIoT Edge Privacy-Aware Intrusion Detection

Erik De Elias (Universidade de São Paulo – USP – Brazil), Vinicius Carriel (Universidade de São Paulo – USP – Brazil), Guilherme de Oliveira (Universidade de São Paulo – USP – Brazil), Aldri dos Santos (Universidade Federal de Minas Gerais – UFMG – Brazil), Michele Nogueira (Universidade Federal de Minas Gerais – UFMG – Brazil), Roberto Hirata Jr. (University of Sao Paulo – USP – Brazil), Daniel Batista (Universidade de São Paulo – USP – Brazil)

A Stacked Ensemble Classifier for an Intrusion Detection System in the Edge of IoT and IIoT Networks

Giovanni Oliveira (Universidade de São Paulo – USP – Brazil), Priscila Lima (Universidade de São Paulo – USP – Brazil), Fabio Kon (Universidade de São Paulo – USP – Brazil), Routo Terada (Universidade de São Paulo – USP – Brazil), Daniel Batista (Universidade de São Paulo – USP – Brazil), Roberto Hirata Jr. (Universidade de São Paulo – USP – Brazil), Mosab Hamdan (Universidade de São Paulo – USP – Brazil)

A Deep Learning-based System for DDoS Attack Anticipation

Gabriel Lucas Silva (Universidade Federal de Minas Gerais – UFMG – Brazil) Anderson Neira (Universidade Federal do Paraná – UFPR – Brazil), Michele Nogueira (Universidade Federal de Minas Gerais – UFMG – Brazil)

OMINACS: Online ML-Based IoT Network Attack Detection and Classification System

Diego de Abreu (Universidade Federal do Pará – UFPA – Brazil), Antônio Abelém (Universidade Federal do Pará – UFPA – Brazil)

TS3: Communications Theory and Systems

Room 3 (Parati 3), Thursday, December 1, 11:30-13:00 – Chair: Yessica Sáez (Universidad Tecnológica de Panamá)

Analysis of the Power Imbalance in Power-Domain NOMA on Correlated Rayleigh Fading Channels

Shaokai Hu (Nanjing University of Posts and Telecommunications – P.R. China) Hao Huang (Nanjing University of Posts and Telecommunications – P.R. China), Guan Gui (Nanjing University of Posts and Telecommunications – P.R. China), Hikmet Sari (Sequans Communications – France)

On Evaluation of Interpolation Between Reed-Muller and Polar Rate-Profiling in PAC Codes

Tatiana Rykova (Fraunhofer Heinrich Hertz Institute – Germany), Baris Göktepe (Fraunhofer Heinrich Hertz Institute – Germany), Thomas Schierl (Fraunhofer Heinrich Hertz Institute – Germany), Cornelius Hellge (Fraunhofer Heinrich Hertz Institute – Germany)

Performance Analysis of 1-Bit Quantization with Oversampling for Higher-Order Constellations

Christian Forsch (Friedrich-Alexander-Universität Erlangen-Nürnberg – Germany), Peter Zillmann (Qualcomm CDMA Technologies – Germany), Osama Alrabadi (Qualcomm CDMA Technologies – Germany), Stefan Brueck (Qualcomm CDMA Technologies – Germany), Wolfgang Gerstacker (Friedrich-Alexander-Universität Erlangen-Nürnberg – Germany)

A Study on the Uncertainty in Estimation for Short-Length Communication

Yan Coutinho (Universidade Federal de Juiz de Fora – UFJF – Brazil) Guilherme Colen (Admiral Wandenkolk Instruction Center – Brazil) Túlio Moreira (Universidade Federal de Juiz de Fora – UFJF – Brazil) Mateus Filomeno (Universidade Federal de Juiz de Fora – UFJF – Brazil) Moisés Ribeiro (Universidade Federal de Juiz de Fora – UFJF – Brazil)

TS4: Optical Communications and Optical Networks

Room 4 (Búzios), Thursday, December 1, 11:30-13:00 – Chair: Diogo Mattos (UFF)

Backup, Routing, Modulation, Spectrum and Core Allocation in SDM-EON for Efficient Spectrum Utilization

Helder Oliveira (Universidade Federal do ABC – UFABC – Brazil) Nelson Fonseca (Universidade Estadual de Campinas – UNICAMP – Brazil)

Effectiveness of Coherent Pluggable Interfaces in Brownfield Optical Network Deployments

Joao Pedro (Infinera Unipessoal Lda – Portugal), Harald Bock (Infinera GmbH – Germany)

Modeling the Bias Current and OFDM Signal Power under Amplitude Constraints for SI-POF

Jonathan Gois (Centro Federal de Educação Tecnológica Celso Suckow da Fonseca – CEFET/RJ – Brazil), Julio Neto Thomaz (Centro Federal de Educação Tecnológica Celso Suckow da Fonseca – CEFET/RJ – Brazil), Flavio Nogueira Sampaio (Orange – France), Tadeu Ferreira (Universidade Federal Fluminense – Brazil), Andres Lopez Barbero (Universidade Federal Fluminense – Brazil), Luiz Anet Neto (IMT Atlantique – France), Vinicius Silva (Universidade Federal Fluminense – Brazil)

Split-Demand and Multipath Routing in Space-Division Multiplexing Optical Networks

Silvana Trindade (Universidade Estadual de Campinas – UNICAMP- Brazil), Nelson Fonseca (Universidade Estadual de Campinas – UNICAMP – Brazil)

Keynotes

Keynote 3: Prof. Tommaso Melodia (Northeastern University, USA)

AI-based Control and Orchestration in the Open RAN: Architectures, Algorithms, Testbeds

Parati 1+2+3, Thursday, December 1, 2022 – 14:30-16:00 (BRT)

Technical Sessions

TS5: Service Security and Privacy

Room 1 (Parati 1), Thursday, December 1, 16:30-18:00 – Chair: Yacine Ghamri-Doudane (ULR)

Topological Evolution Analysis of Payment Channels in the Lightning Network

Gustavo Camilo (Universidade Federal do Rio de Janeiro – UFRJ – Brazil), Gabriel Rebello (Universidade Federal do Rio de Janeiro – UFRJ – Brazil), Lucas Airam Souza (Universidade Federal do Rio de Janeiro – UFRJ – Brazil), Maria Potop-Butucaru (Sorbonne Université – France), Marcelo Dias de Amorim (LIP6/CNRS – Sorbonne Université – France), Miguel Elias Mitre Campista (Universidade Federal do Rio de Janeiro – UFRJ – Brazil), Luis Henrique Costa (Universidade Federal do Rio de Janeiro – UFRJ – Brazil)

Function as a Service Offloaded to a SmartNIC

Racyus Pacífico (Universidade Federal de Minas Gerais – UFMG- Brazil), Lucas Duarte (Universidade Federal de Viçosa – UFV – Brazil), José Augusto Nacif (Universidade Federal de Viçosa – UFV – Brazil), Marcos Vieira (Universidade Federal de Minas Gerais – UFMG – Brazil)

A Dynamic Method to Protect User Privacy Against Traffic-based Attacks on Smart Home

Bruna Vitória dos Santos (Universidade Federal de Santa Maria – UFSM – Brazil), Andressa Vergutz (Universidade Federal do Paraná – UFPR – Brazil), Ricardo Tombesi Macedo (Universidade Federal de Santa Maria – UFSM – Brazil), Michele Nogueira (Universidade Federal de Minas Gerais – UFMG – Brazil)

UPriv-AC: A Privacy-Preserving Mechanism for Smart Metering Against Curious Utility

Tiago Bornia (Universidade Federal Fluminense – UFF- Brazil), Natalia Castro Fernandes (Universidade Federal Fluminense – UFF – Brazil)

TS6: Artificial Intelligence for Communications and Networks

Room 2 (Parati 2), Thursday, December 1, 16:30-18:00 – Chair: Rodrigo Couto (UFRJ)

A Lightweight Unsupervised Learning Architecture to Enhance User Behavior Anomaly Detection

Andre Molina (Universidade de Brasília – UnB -Brazil), Vinícius Gonçalves (Universidade de Brasília – UnB -Brazil), Rafael de Sousa Junior (Universidade de Brasília – UnB -Brazil), Marcel Pividal (Amazon Web Services – USA), Rodolfo Meneguette (Universidade de São Paulo – USP – Brazil), Geraldo Pereira (Universidade de Brasília – UnB -Brazil)

CNN-based Algorithm for Joint Channel and Phase Noise Estimation in OFDM Relay Systems

Fábio Coutinho (Universidade de Aveiro – Portugal), Hugerles Silva (Universidade de Brasília – UnB – Brazil), Petia Georgieva (Universidade de Aveiro – Portugal), Arnaldo Oliveira (Universidade de Aveiro – Portugal)

Compression of Activation Signals from Split Deep Neural Network

Flávio Brito (Ericsson Research and Lund University – Sweden), Lucas Silva (Universidade Federal do Pará – UFPA – Brazil), Leonardo Ramalho (Universidade Federal do Pará – UFPA – Brazil), Silvia Lins (Ericsson Research – Brazil), Neiva Linder (Ericsson Research – Sweden), Aldebaro Klautau (Universidade Federal do Pará – UFPA – Brazil)

Super Learner Ensemble for Sound Classification using Spectral Features

Luana Gantert (Universidade Federal do Rio de Janeiro – UFRJ – Brazil), Matteo Sammarco (AXA – France), Marcin Detyniecki (AXA – France), Miguel Elias Mitre Campista (Universidade Federal do Rio de Janeiro – UFRJ – Brazil)

TS7: Elastic Networks

Room 3 (Parati 3), Thursday, December 1, 16:30-18:00 – Chair: Miguel Campista (UFRJ)

Resilient Routing and Resource Allocation in SDM-EON

Helder Oliveira (Universidade Federal do ABC – UFABC – Brazil), Nelson Fonseca (universidade de Campinas – UNICAMP – Brazil)

Fragmentation-aware Routing, Space, and Spectrum Assignment using Ant Colony Optimization

Leandro Alvarez de Lima (Universidade Federal do ABC – UFABC – Brazil), Gustavo Sousa Pavani (Universidade Federal do ABC – UFABC – Brazil)”

A Proactive Algorithm for the Mitigation of Fragmentation Losses in Elastic Links

Rodrigo Campos Bortoletto (São Paulo Federal Institute of Education, Science and Technology – IFSP – Brazil), Helio Waldman (Universidade Federal do ABC – UFABC – Brazil), Raul Almeida Jr. (Universidade Federal de Pernambuco – UFPE – Brazil), Vinícius Souza (Universidade Estadual de Campinas – UNICAMP – Brazil)

Improving Multi-Band Elastic Optical Networks Performance using Behavior Induction on Deep Reinforcement Learning

Marcelo Gonzalez (Universidad Tecnica Federico Santa Maria – Chile), Felipe Condon (Universidad Tecnica Federico Santa Maria – Chile), Patricia Morales (Universidad Tecnica Federico Santa Maria – Chile), Nicolas Jara (Universidad Tecnica Federico Santa María – Chile)

TS8: Vehicular, Aerial, and Satellite Communications and Networks I

Room 4 (Búzios), Thursday, December 1, 16:30-18:00 – Chair: Pedro Cruz (UFRJ)

Traffic-Aware Beacon Interval for Position-Based Protocols in VANETs

Alvaro Amaya (Universidade Tecnológica Federal do Paraná – UTFPR – Brazil), Alexandre Pohl (Universidade Tecnológica Federal do Paraná – UTFPR – Brazil), Mauro Fonseca (Universidade Tecnológica Federal do Paraná – UTFPR – Brazil), Ricardo Lüders (Universidade Tecnológica Federal do Paraná – UTFPR – Brazil)

Connectivity-based Fog Structure Management for Software-defined Vehicular Networks

Penghan Yan (Brock University – Canada), Rodolfo Meneguette (Universidade de São Paulo – USP – Brazil), Robson De Grande (Brock University – Canada)

Uplink Interference Management in Cellular-Connected UAV Networks Using Multi-Armed Bandit and NOMA

Fatemeh Banaeizadeh (Carleton University – Canada), Michel Barbeau (Carleton University – Canada), Joaquin Garcia-Alfaro (Institut Polytechnique de Paris – France), Venkata Srinivas Kothapalli (Motorola Mobility – Canada), Evangelos Kranakis (Carleton University – Canada)

Beyond the Standard Quantum Limit in the Synchronization of Low-Earth-Orbit Satellites

Ronakraj Gosalia (University of New South Wales – Australia), Robert Malaney (University of New South Wales – Australia), Ryan Agnaldo (Northrop Grumman Corporation – USA), Jonathan Green (Northrop Grumman Corporation – USA), Mark Clampin (NASA Goddard Space Flight Center – USA)

TS9: Communication QoS, Reliability and Performance Modeling

Room 1 (Parati 1), Thursday, December 1, 18:15-19:45 – Chair: Marcelo Rubinstein (UERJ)

Estimating performance in dense IEEE 802.11 networks with E-AFTER

Juan Lucas Vieira (Universidade Federal Fluminense – UFF – Brazil), Diego Passos (Universidade Federal Fluminense – UFF – Brazil)

A Straightforward Method to Promote Effective Interoperability in WiSUN-FAN Smart Grid Networks

Claudio Dias (Instituto de Pesquisas Eldorado – Brazil), Lucas Diogo de Mendonça (Instituto de Pesquisas Eldorado – Brazil), Karoline Ferreira Tornisiello (Instituto de Pesquisas Eldorado – Brazil), Andre Saito Guerreiro (Instituto de Pesquisas Eldorado – Brazil), Eduardo Lima (Instituto de Pesquisas Eldorado – Brazil), Gustavo Fraidenaich (Universidade Estadual de Campinas – UNICAMP – Brazil)

AI-enabled SD-WAN: the case of Reinforcement Learning

Annalisa Navarro (University of Napoli Federico II – Italy), Alessio Botta (University of Napoli Federico II – Italy), Roberto Canonico (University of Napoli Federico II – Italy), Saverio Ruggiero (University of Napoli Federico II – Italy), Giorgio Ventre (University of Napoli Federico II – Italy)

Immortal Under the Edge of a Knife: Self-Healing Distributed Services on MANET Partitioning

Sandra Zimmermann (Technische Universität Dresden – Germany), Paul Schwentek (Technische Universität Dresden – Germany), Christian Vielhaus (Technische Universität Dresden – Germany), Juan Cabrera (Technische Universität Dresden – Germany), Frank Fitzek (Technical University of Dresden – Germany)”

TS10: Machine Learning for Communications and Networks

Room 2 (Parati 2), Thursday, December 1, 18:15-19:45 – Chair: Antônio Abelém (UFPA)

Traffic Restoration in Communication Networks by Meta-Learning Inspired Algorithm Selection: A Case Study for IP-Optical SDN Networks

Ronald Romero Reyes (Technische Universität Chemnitz – TUC – Germany), Thomas Bauschert (Technische Universität Chemnitz – TUC – Germany)

Design and Analysis of Neural-Network-based, Single-User Codes for Multiuser Channels

N. Cameron Matson (Southern Methodist University – USA), Dinesh Rajan (Southern Methodist University – USA),
Joseph Camp (Southern Methodist University – USA)

Dynamic Routing in Challenged Networks with Graph Neural Networks

Ricardo Lent (University of Houston – USA)

Ray-Tracing MIMO Channel Dataset for Machine Learning Applied to V2V Communication

Daniel Suzuki (University Federal of Pará – UFPA – Brazil), Ailton Oliveira (Universidade Federal do Pará – UFPA – Brazil), Luan Gonçalves (Universidade Federal do Pará – UFPA – Brazil), Ilan Correa (Universidade Federal do Pará – UFPA – Brazil),
Silvia Lins (Ericsson Research – Brazil), Pedro Batista (Ericsson Research – Sweden), Aldebaro Klautau (Universidade Federal do Pará – UFPA – Brazil)

TS11: Signal Processing for Communications

Room 3 (Parati 3), Thursday, December 1, 18:15-19:45 – Chair: Igor Moraes (UFF)

Learned Preconditioned Conjugate Gradient Descent for Massive MIMO Detection

Toluwaleke Olutayo (McGill University – Canada), Benoit Champagne (McGill University – Canada)

The solid-body reverberating ultrasound communications channel and its OFDM interference

Asra Ashraf (Luleå University of Technology – Sweden), Johan E Carlson (Luleå University of Technology – Sweden),
Jaap van de Beek (Luleå University of Technology – Sweden)

IB-DFE receiver for generalized SIMO DFT precoded filter bank systems in doubly selective channels

Rogério Pereira Junior (Universidade Federal de Santa Catarina – UFSC – Brazil),
Bruno Sens Chang (Universidade Tecnológica Federal do Paraná – UTFPR – Brazil),
Carlos Rocha (Universidade Federal de Santa Catarina – UFSC – Brazil),
Didier Le Ruyet (Conservatoire National des Arts et Métiers – CNAM – France)

Advanced receivers for QAM-FBMC systems with short filters

Iandra Galdino (Universidade Federal Fluminense – UFF – Brazil), Rostom Zakaria (Conservatoire National des Arts et Métiers – CNAM – France), Didier Le Ruyet (Conservatoire National des Arts et Métiers – CNAM – France), Marcello Campos (Universidade Federal do Rio de Janeiro – UFRJ – Brazil)

TS12: Location-based Services

Room 4 (Búzios), Thursday, December 1, 18:15-19:45 – Chair: Alberto Schaeffer-Filho (UFRGS)

Wi-Fi CSI-based Human Presence Detection Using DTW Features and Machine Learning

Julio Huarachi Soto (Universidade Federal Fluminense – UFF – Brazil), Iandra Galdino (Universidade Federal Fluminense – UFF – Brazil), Brenda Gouveia (Universidade Federal Fluminense – UFF – Brazil), Egberto Caballero (Universidade Federal Fluminense – UFF – Brazil), Vinicius Ferreira (Universidade Federal Fluminense – UFF – Brazil), Debora Muchaluat-Saade (Universidade Federal Fluminense – UFF – Brazil), Celio Albuquerque (Universidade Federal Fluminense – UFF – Brazil)

SPIN: Sensor Placement for Indoor Navigation of Drones

Alireza Famili (Virginia Tech – USA), Angelos Stavrou (Virginia Tech – USA), Haining Wang (Virginia Tech – USA),
Jung-Min Park (Virginia Tech – USA)

GPS Spoofing Detection by Leveraging 5G Positioning Capabilities

Alireza Famili (Virginia Tech – USA), Mahsa Foruhandeh (Virginia Tech – USA), Tolga Atalay (Virginia Tech – USA), Angelos Stavrou (Virginia Tech – USA), Haining Wang (Virginia Tech – USA)

December 1, 2022

Keynotes

Keynote 4: Prof. Jussara Almeida (UFMG, Brazil)

Misinformation on the Web: Fighting our own demons

Parati 1+2+3, Friday, December 2, 2022 – 9:30-11:00 (BRT)

Technical Sessions

TS13: Vehicular, Aerial, and Satellite Communications and Networks II

Room 1 (Parati 1), Friday, December 2, 11:30-13:00 – Chair: Pavlos Lazaridis (University of Huddersfield)

Intelligent Configuration of PHY-Layer Parameters to Reduce Energy Consumption in LoRa

Mário Filho (Universidade Federal do Rio de Janeiro – UFRJ – Brazil), Miguel Elias Mitre Campista (Universidade Federal do Rio de Janeiro – UFRJ – Brazil)

Characterization of PDOP for Locating a Geostationary Satellite using TWSTFT Links

Mauro Lima (National Institute of Metrology – Inmetro – Brazil), Luiz Tarelho (National Institute of Metrology – Inmetro – Brazil)

Effect of Antenna Orientation and UAV Position on UAV Communications in 3D Space

N. Cameron Matson (Southern Methodist University – USA), Joseph Camp (Southern Methodist University – USA),
Dinesh Rajan (Southern Methodist University – USA)

Enabling Resilient and Real-Time Network Operations in Space: A Novel Multi-Layer Satellite Networking Scheme

Peng Hu (Digital Technologies Research Center- NRC – Canada)

TS14: Cloud, Edge and Fog Computing

Room 2 (Parati 2), Friday, December 2, 11:30-13:00 – Chair: Débora Muchaluat-Saade (UFF)

A Novel Network Slicing based Security-as-a-Service (SECaaS) Framework for Private 5G Networks

Shalitha Wijethilaka (University College Dublin – Ireland), Madhusanka Liyanage (University of Oulu – Finland)

A Novel Short-term Vehicle Location Prediction using Temporal Graph Neural Networks

Farimasadat Miri (Ontario Tech University – Canada), Alireza Abdollah Zadeh Namanloo (Ontario Tech University – Canada), Allan M. de Souza (Universidade de Campinas – UNICAMP – Brazil), Richard Pazzi (Ontario Tech University – Canada)

A Socio-temporal MEC Cache Prefetching Policy

Cleomar Oliveira (Universidade Federal Fluminense – UFF – Brazil), Igor Moraes (Universidade Federal Fluminense – UFF – Brazil), Celio Albuquerque (Universidade Federal Fluminense – UFF – Brazil), José Lima (Unisinós – Brazil)

Decision Early-Exit: An Efficient Approach to Hasten Offloading in BranchyNets

Mariana Maciel Barbosa (Universidade Federal do Rio de Janeiro – UFRJ – Brazil), Roberto Pacheco (Universidade Federal do Rio de Janeiro – UFRJ – Brazil), Rodrigo de Souza Couto (Universidade Federal do Rio de Janeiro – UFRJ – Brazil), Dianne Medeiros (Universidade Federal Fluminense – UFF – Brazil), Miguel Elias Mitre Campista (Universidade Federal do Rio de Janeiro – UFRJ – Brazil)

TS15: Next-Generation Networking and Internet

Room 3 (Parati 3), Friday, December 2, 11:30-13:00 – Chair: Luís Henrique Costa (UFRJ)

WBAP: A Wireless Broadcast Access Protocol for the IEEE802.11bc Enhanced Broadcast Service

Antonio Rueda (Universidad de Castilla-La Mancha – Spain), Luis Orozco-Barbosa (Universidad de Castilla-La Mancha – Spain), Ahmed Boujnoui (University Hassan I – Morocco), Jaime Camacho (Universidad Nacional Autónoma de México – Mexico), Jaime Gomez (Universidad Nacional Autónoma de México – Mexico)

Multi-band Optical Network Assisted by GNPY: an Experimental Demonstration

Mariano Devigili (Universitat Politècnica de Catalunya – Spain), Pantea Nadimi Goki (Scuola Superiore Sant’Anna – Italy), Nicola Sambo (Scuola Superiore Sant’Anna – Italy), Piero Castoldi (Scuola Superiore Sant’Anna – Italy), Luca Potì (CNIT – Italy), Andrea D’Amico (Politecnico di Torino – Italy), Vittorio Curri (Politecnico di Torino – Italy)

Energy Efficiency Aware Collaborative Multi-UAV Deployment for Intelligent Traffic Surveillance

Xiang Cheng (Henan University – P.R. China), Huaguang Shi (Henan University – P.R. China), Zhanqi Jin (Henan University – P.R. China), Nianwen Ning (Henan University – P.R. China), Yanyu Zhang (Henan University – P.R. China), Yi Zhou (Henan University – P.R. China)

Adding Hardware Security into IoT-Blockchain Platforms

Subhi Alrubei (University of Sheffield – Great Britain), Edward Ball (University of Sheffield – Great Britain), Jonathan Rigelsford (Sensata Technologies – Great Britain)

TS16: Wireless Communications

Room 4 (Búzios), Friday, December 2, 11:30-13:00 – Chair: Yacine Ghamri-Doudane (ULR)

A General MIMO VLC Channel Model for Underground Mining Environments

Julian Solis (Universidad de Chile – Chile), Pablo Palacios Játiva (Universidad de Chile -Chile), Cesar Azurdia Meza (Universidad de Chile – Chile), David Zabala Blanco (Universidad Católica del Maule – Chile), Ismael Soto (Universidad de Santiago de Chile – Chile), Muhammad Ijaz (Manchester Metropolitan University – Great Britain)

Soft Actor Critic Framework for Resource Allocation in Backscatter-NOMA Networks

Abdullah Alajmi (Queen Mary University of London – Great Britain), Muhammad Fayaz (Queen Mary University of London – Great Britain), Waleed Ahsan (Queen Mary University of London – Great Britain), Arumugam Nallanathan (Queen Mary University of London – Great Britain)

Path-Loss Prediction of Millimeter-wave using Machine Learning Techniques

Yoiz Nuñez (Pontificia Universidade Católica do Rio de Janeiro – PUC-Rio – Brazil), Lisandro Lovisoló (Universidade do Estado do Rio de Janeiro – UERJ – Brazil), Luiz da

Silva Mello (Pontificia Universidade Católica do Rio de Janeiro – PUC-Rio – Brazil),
Carlos Orihuela (Pontificia Universidade Católica do Rio de Janeiro – PUC-Rio –
Brazil)

Machine learning-based channel estimation for insufficient redundancy OFDM receivers using comb-type pilot arrangement

Marcele Mendonça (Universidade Federal do Rio de Janeiro – UFRJ – Brazil), Tadeu
Ferreira (Universidade Federal Fluminense – UFF – Brazil), Paulo Diniz (Universidade
Federal do Rio de Janeiro – UFRJ – Brazil)

Closing Session

Special Lunch with World Cup Match

Patrons



Diamond



Silver



Bronze