WD'25

13th Wireless Days Conference

December 01-03, 2025

Niterói, Brazil

#wd2025

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Program At-a-Glance

Time	Monday, December 1, 2025	Tuesday, December 2, 2025	Wednesday, December 3, 2025
9:00:9:30	Registration and Opening Talk	Registration	Registration
9:30-10:30	Keynote 1 - Alessandra Rizzardi (University of Insubria, Italy)	Keynote 2 - Matteo Sammarco (Stellantis, France)	Keynote 3 - Marcello Campos (UFRJ)
10:30-11:00	Coffee-break		
11:00-12:30	TS1 - AI, Learning & Data-Driven Wireless	TS3 - Best Papers	TS5 - Aerial, Satellite & Drone Networks
12:30-14:30	Lunch		
14:30-16:00	TS2 - IoT & Edge Systems	TS4 - Security, Privacy & Trust for Edge/IoT	Ind. Talk - TBD (Inoa) TS6 - RAN, MEC & Open RAN Platforms
16:00-16:30	Coffee-break		
16:30-18:00	SPTS1 — Open RAN, 5G/6G Systems and Networking	Ind. Talk - Antonio Lobato (Atomo.ai) SPTS2 - Demos	SPTS3 - AI, ML and Security in 5G/6G Networks
18:30	Welcome reception		Closing Ceremony
19:00		Conference dinner	

Keynote Speakers

Keynote #1 Mon, Dec 01, 9:30 AM

Digital Transformation between Reliability and Security in the Industrial Internet of Things era

Alessandra Rizzardi
(University of Insubria, Italy)

Keynote #2 Tue, Dec 02, 9:30 AM

AI for connected vehicles: emerging trends and challenges

Matteo Sammarco
(Stellantis, France)

Keynote #3 Wed, Dec 03, 9:30 AM

Reconfigurable (Intelligent) Surfaces

Marcello Luiz Rodrigues de Campos
(UFRJ, Brazil)

Day #1 Mon, Dec 01

Time			
8:30:00 AM	9:00:00 AM	**Registration**	
9:00:00 AM	9:30:00 AM	**Opening Ceremony**	
9:30:00 AM	10:30:00 AM	**Keynote 1 - Alessandra Rizzardi (University of Insubria, Italy)**	
10:30:00 AM	11:00:00 AM	**Coffee Break**	
11:00:00 AM	12:30:00 PM	TS1 — AI, Learning & Data-Driven Wireless	**A recursive spectral clustering algorithm for intelligent grouping in dense wireless networks** – Bruna Guedes (Universidade Federal Fluminense, Brazil); Célio Vinicius Neves de Albuquerque (Universidade Federal Fluminense, Brazil); Diego Passos (Instituto Superior de Engenharia de Lisboa, Portugal); Fernanda G. O. Passos (Instituto Superior de Engenharia de Lisboa, Portugal & COPELABS - Universidade Lusófona, Portugal)
			Machine Learning-Based Indoor Positioning Using Wi-Fi 7 with Multi-Link Operation – David Alan de Oliveira Ferreira (Sidia Institute of Science and Technology, Brazil); Wesley B. Conde (Sidia Institute of Science and Technology, Brazil); Janislley De Sousa (SIDIA, Brazil); Higo Ferreira Albuquerque (Sidia Institute of Science and Technology, Brazil); Moyses Mendes Lima (National Institute of Amazonian Research (INPA), Brazil)
			A Transformer-Based Methodology for Person-Independent Human Activity Recognition Using Wi-Fi CSI – Allan Costa Nascimento dos Santos (Universidade Federal Fluminense, Brazil); Pamella Soares de Sousa (Universidade Estadual do Ceará, Brazil); Iandra Galdino (Federal Fluminense University - UFF, Brazil); Julio César Huarachi Soto, Sr. (Fluminense Federal University - UFF & MídiaCom Laboratory, Brazil); Cledson O de Sousa (Universidade Federal Fluminense, Brazil); Taiane Ramos (Universidade Federal Fluminense, Brazil); Célio Vinicius Neves de Albuquerque (Universidade Federal Fluminense, Brazil); Raphael Guerra (Universidade Federal Fluminense, Brazil); Natalia Fernandes (Universidade Federal Fluminense & Midiacom, Brazil); Debora Muchaluat-Saade (Universidade Federal Fluminense, Brazil); Gheorghita Ghinea (Brunel University, United Kingdom (Great Britain))
			SLArch: A Network Metric-aware Split Learning Architecture for B5G/6G Mobile Networks – Cleyber B. Reis (Universidade Federal de Goiás - UFG, Brazil); Antonio Oliveira-Jr (Fraunhofer Portugal AICOS, Portugal & Federal University of Goias, Brazil); Maria Ribeiro (UFG, Goiânia-Brasil/ INESC-TEC, Porto-Portugal, Brazil); Renan Rodrigues Oliveira (Instituto Federal de Goiás, Brazil); Waldir Moreira (Fraunhofer Portugal AICOS, Portugal)
12:30:00 PM	2:30:00 PM	**Lunch**	
2:30:00 PM	4:00:00 PM	TS2 — IoT & Edge Systems	**Optimizing Downlink Control Resources Allocation for Internet-of-Things in Future Cellular Networks** – Tiago Pedroso da Cruz de Andrade (State University of Campinas, Brazil); Matheus J Ota (University of Waterloo, Canada); Nelson L. S. da Fonseca (State University of Campinas, Brazil); Flávio K. Miyazawa (University of Campinas, Brazil)
			Adaptive Physical-Layer Parameter Optimization in LoRa via Low-Pass Filter Mechanism – Khalid Usman (Federal University of Juiz de Fora, Brazil); André de Oliveira (Universidade Federal de Juiz de Fora, Brazil); Edelberto Franco Silva (Universidade Federal de Juiz de Fora, Brazil)
			Real-world Validation of Objective Functions for Heuristic-based Wireless Multipath Routing – Gabriel Alves Barbosa (CEFET-MG, Brazil); Fabiano Pereira Bhering (CEFET-MG, Brazil); Diego Passos (Instituto Superior de Engenharia de Lisboa, Portugal); Célio Vinicius Neves de Albuquerque (Universidade Federal Fluminense, Brazil)
			Bio-molecular cryptography for protecting nano-network transmissions in healthcare applications – Alessandra Rizzardi (University of Insubria, Italy); Giuseppe Piro (Politecnico di Bari, Italy); Sabrina Sicari (University of Insubria, Italy); Luigi Alfredo Grieco (Politecnico di Bari, Italy); Alberto Coen-Porisini (University of Insubria, Italy)
			Intelligent Energy Arbitration in Edge Networks with Distributed Digital Twins – Khaldoun Al Agha (Green Communications, France); Guy Pujolle (Sorbonne University & Green Communications Company, France)
4:00:00 PM	4:30:00 PM	**Coffee Break**	
4:30:00 PM	6:00:00 PM	SPTS1 — Open RAN, 5G/6G Systems and Networking	**Collision-Aware Random Access Procedure for 5G/6G Mobile Networks in mIoT Scenarios** – Giancarlo Maldonado Cárdenas (State University of Campinas (UNICAMP), Brazil); Tiago Pedroso da Cruz de Andrade (State University of Campinas, Brazil); Carlos Alberto Astudillo Trujillo (Unicamp, Brazil); Nelson Fonseca (State University of Campinas, Brazil)
			Adaptive 5G NR-U/Wi-Fi Coexistence with Multiple Numerologies for 3GPP Fairness – Lucas Buzetto Tsuchiya, Sr. Lucas (Federal Technological University of Paraná, Brazil & UTFPR, Brazil); Hermes I Del Monego (UTFPR, Brazil); Bruno Chang (Federal University of Technology - Paraná, Brazil)
			Hybrid Inception-BiLSTM and SVM for Enhanced CSI-based Human Activity Recognition – Alison Michel Fernandes (UTFPR - Universidade Tecnológica Federal Do Paraná, Brazil); Hermes I Del Monego (UTFPR, Brazil); Bruno Chang (Federal University of Technology - Paraná, Brazil); Anelise Munaretto (UTFPR, Brazil); Helder Fontes (INESC TEC and FEUP, Portugal); Rui Campos (INESC TEC and Faculty of Engineering, University of Porto, Portugal)
			Optimization of Terrain-Aware Base Station Placement for Spatial Coverage – Ryuto Fukuma (The University of Tokyo, Japan); Arthur Sousa de Sena (University of Oulu, Finland); Akihiro Nakao (The University of Tokyo, Japan)
			Empirical study on the adoption of different Wi-Fi versions: a case study in Lisbon – Renata M Castanheira (Instituto Superior de Engenharia de Lisboa, Portugal); Diego Passos (Instituto Superior de Engenharia de Lisboa, Portugal)
			A Comprehensive Overview on Secure Open RAN Slicing Scientific Literature – Nelson Ion de Oliveira (Federal University of Rio Grande Do Norte, Brazil); Augusto Venâncio Neto (Federal University of Rio Grande Do Norte (UFRN), Brazil & IT Aveiro, Portugal); Vicente Sousa (Federal University of Rio Grande do Norte & Group for Researching and Fast Prototyping Solutions for Communication (GPPCOM), Brazil); Helber Wagner Da Silva (Federal Institute of Rio Grande do Norte, Brazil)
			QoS and QoE Analysis of Audio and Video Streaming for 5G/Wi-Fi Tactical Mesh Networks Deployments – Mohammad Imran Syed (ISAE-SUPAERO, France); Nicolas Peugnet (Sorbonne Université, France); Kaouther Ouali (Sorbonne University, France & LIP6, France); Thi Mai Trang Nguyen (Université Sorbonne Paris Nord & Sorbonne Université, France); Anne Fladenmuller (LIP6/Sorbonne Université, France); Brigitte Kervella (LIP6, France)
6:30:00 PM	8:30:00 PM	**Welcome Reception**	

Day #2 Tue, Dec 02

Time			
9:00:00 AM	9:30:00 AM	Registration	
9:30:00 AM	10:30:00 AM	**Keynote 2 - Matteo Sammarco (Stellantis)**	
10:30:00 AM	11:00:00 AM	**Coffee Break**	
11:00:00 AM	12:30:00 PM	TS3 - Best Papers Session	**Proactive Decentralized Multi-Agent Data-Driven Node Relocation for Jammed Mobile Networks** – Silas Leuenberger (Uni Bern, Switzerland); Antonio Di Maio (ETH Zurich, Switzerland); Torsten Ingo Braun (University of Bern, Switzerland)
			Self-Supervised Learning for Spectrogram-Based Identification of Mobile Communications Technologies – Gabriel S. Enoki (University of Campinas, Brazil); Carlos A. Astudillo (University of Campinas, Brazil)
			Scalable Optimization of Edge-Cloud Resource Allocation for IoT in Smart Cities – Bruno Luiz Rodrigues e Silva (Universidade Federal de São João del-Rei, Brazil); Viviane Costa Santos (Universidade Federal de São João del-Rei, Brazil); Henrique Souza Giacomin (Universidade Federal de São Jõao del-Rei, Brazil); Alex Bastos (Universidade Federal de São João del Rei, Brazil); Samuel Moreira Abreu Araújo (Federal University of Sao Joao del Rei, Brazil)
			An FPGA-Based LDPC Decoder for Smart-NICs – Hassan Chreif (CNAM, France); Lounis Zerioul (Conservatoire Nation Des Arts et Metiers, France); Julio Cesar Perez (CNAM, France); Stefano Secci (Cnam, France); Sami Taktak (CNAM, France)
12:30:00 PM	2:30:00 PM	**Lunch**	
2:30:00 PM	4:00:00 PM	TS4 — Security, Privacy & Trust for Edge/IoT	**Performance Evaluation of IOTA Tangle and EVM Blockchain over LoRaWAN IoT Access Networks** – Edison A Arteaga, Sr (University of Cauca, Colombia & University of Campinas, Brazil); Gustavo A Ramírez González (University of Cauca, Colombia); Carlos A. Astudillo (University of Campinas, Brazil)
			Decentralized Federated Anomaly Detection in Mobile Networks – Simon Parris (University of Neuchatel, Switzerland); Antonio Di Maio (ETH Zurich, Switzerland); Torsten Ingo Braun (University of Bern, Switzerland)
			Bloom Filter Traffic Encoding for Multi-Model Intrusion Detection and Attack Quantification – Ana Carolina Rocha Mendes (Universidade Federal Fluminense, Brasil); Thi Mai Trang Nguyen (Université Sorbonne Paris Nord & Sorbonne Université, France); Diogo M. F. Mattos (Universidade Federal Fluminense & MídiaCom, Brazil)
			Containerized IoT Solution for Smart Energy Metering with Real-Time Visualization – Ewerton Leandro De Sousa (Federal University of Rio Grande do Norte, Brazil); Leonardo A. Marques (Universidade Federal do Rio Grande do Norte, Brazil & EFREI, France); Israel Da S. Felix De Lima (Federal University of Rio Grande do Norte, Brazil); Augusto Venâncio Neto (Federal University of Rio Grande Do Norte (UFRN), Brazil & IT Aveiro, Portugal); Eduardo Cunha Nogueira (Federal University of Rio Grande do Norte, Brazil); Dario Vieira (EFREI, France); Marcio Kreutz (UFRN, Brazil)
			SDDK-AC: Secure Decentralised Data-and-Knowledge Access Control for Predictive Machinery Maintenance – Ramon da Gama Cordeiro (Delft University of Technology, The Netherlands); Yago R. Santos (Universidade Federal Fluminense, Brazil); Yiannis Verginadis (ICCS, Athens University of Economics and Business, Greece); Borja Tornos (Ideko - Member of BRTA, Spain); Gorka Gutierrez Eizaguirre (Ideko - Member of BRTA, Spain); Diogo M. F. Mattos (Universidade Federal Fluminense & MídiaCom, Brazil); Marcela Tuler de Oliveira (Delft University of Technology & Technology, Policy and Management Faculty, The Netherlands)
4:00:00 PM	4:30:00 PM	**Coffee Break**	
4:30:00 PM	5:00:00 PM	**Industry Talk, Antonio Lobato (atomo.ai)**	
5:00:00 PM	6:00:00 PM	SPTS2 — Emerging Applications and Demonstrations	**Demo: An Integrated Pipeline for the Acquisition, Processing, and Analysis of Music Signals** – João Pedro da Silva Pereira (Universidade Federal Fluminense, Brazil); Nicollas R. de Oliveira (Universidade Federal Fluminense, Brazil); Victor Fernandes (Fluminense Federal University, Brazil); Tadeu N Ferreira (Fluminense Federal University, Brazil)
			WiFiCoverage: A Fast and Accurate Tool for Automatic Indoor Coverage Analysis – Renata M Castanheira (Instituto Superior de Engenharia de Lisboa, Portugal); Diego Passos (Instituto Superior de Engenharia de Lisboa, Portugal)
			Demo: Detecting Data-leak using NVIDIA Morpheus - Saoni Mukherjee and Bhavesh A Patel (Dell Technologies, USA)
7:00:00 PM	10:00:00 PM	**Conference Dinner**	

Day #3 Wed, Dec 03

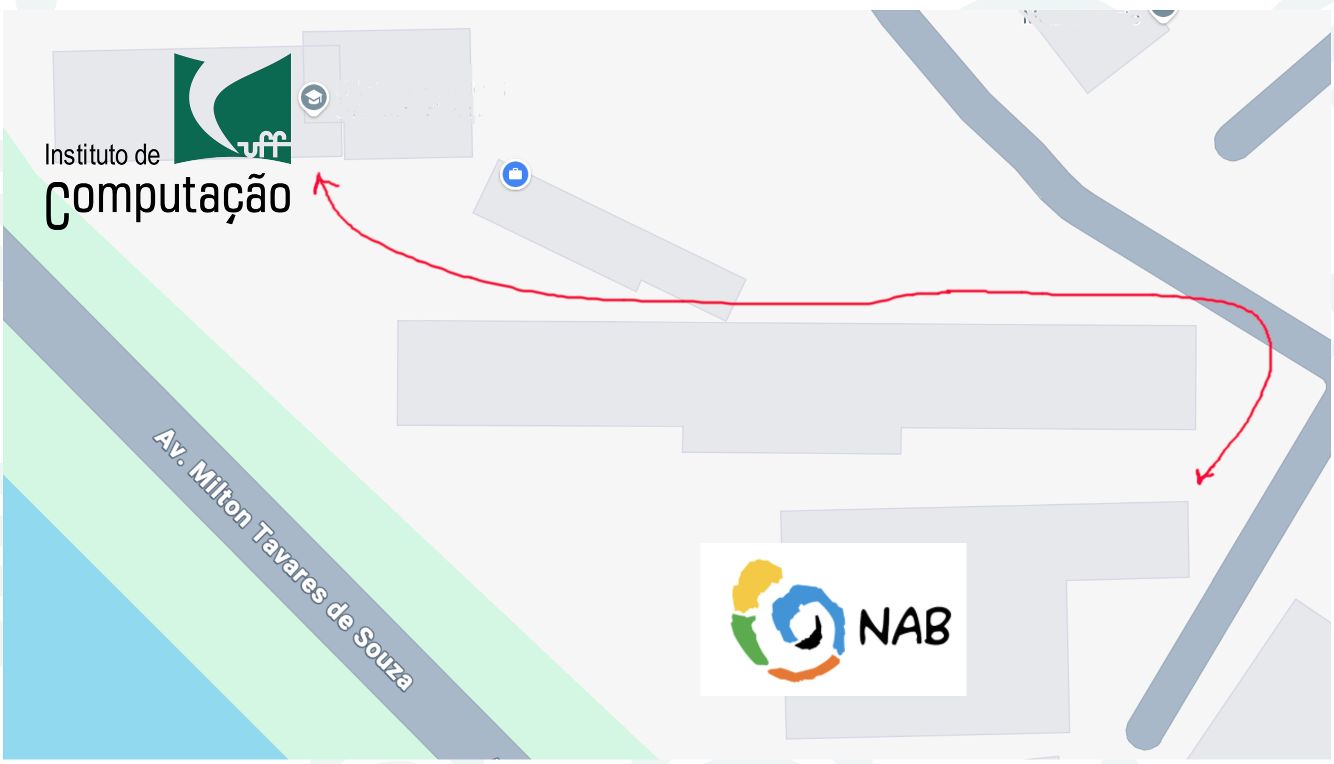
Time			
9:00:00 AM	9:30:00 AM	**Registration**	
9:30:00 AM	10:30:00 AM	**Keynote 3 - Marcello Campos (UFRJ)**	
10:30:00 AM	11:00:00 AM	**Coffee Break**	
11:00:00 AM	12:30:00 PM	TS5 — Aerial, Satellite & Drone Networks	**eSUPPLY: Efficient Energy-aware Multi-UAV Placement in Flying Networks** – Pedro Ribeiro (INESC TEC, Portugal & Universidade do Porto, Portugal); André Coelho (INESC TEC, Portugal); Rui Campos (INESC TEC and Faculty of Engineering, University of Porto, Portugal)
			An RSSI-Driven Association Policy for Auxiliary Drone Networks in Large-Scale Events – Lucas Baptista de Moraes (Universidade Federal Fluminense, Brazil); Natalia Fernandes (Universidade Federal Fluminense & Midiacom, Brazil); Fernanda G. O. Passos (Instituto Superior de Engenharia de Lisboa, Portugal & COPELABS - Universidade Lusófona, Portugal); Dianne Medeiros (Universidade Federal Fluminense, Brazil)
			PARC: Proactive Protocol for Wireless Optical Ad Hoc Networks – Andre Vieira (Universidade Federal de Minas Gerais, Brazil); Luiz F. M. Vieira (Universidade Federal de Minas Gerais, Brazil); Marcos A. M. Vieira (Federal University of Minas Gerais, Brazil); Alex Borges Vieira (Universidade Federal de Juiz de Fora, Brazil); José Augusto Miranda Nacif (Universidade Federal de Viçosa, Brazil)
			A Performance Analysis and Characterization of the Mobile Connection via Low Earth Orbit Satellite Access Network – Ricardo A. Lundgren (Universidade Federal Fluminense, Brazil); Guilherme Nunes Nasseh Barbosa (Universidade Federal Fluminense, Brazil); Ricardo Araujo de Souza Filho (Universidade Federal Fluminense, Brazil); Lucca Vieira Chatack (Universidade Federal Fluminense, Brazil); Nicollas R. de Oliveira (Universidade Federal Fluminense, Brazil); Diogo M. F. Mattos (Universidade Federal Fluminense & MídiaCom, Brazil)
			SMS Service over NB-NTN Satellite Networks for Mobile Devices in Remote Areas – Matheus Fontinele de Aguiar (Sidia Institute of Science and Technology, Brazil); Jordan Kalliure S. Carvalho (Sidia Instituto de Ciencia e Tecnologia, Brazil); Alexandre Estevão (Sidia Institute of Science and Technology, Brazil); Abdel Fadyl Chabi (Sidia Instituto de Ciencia e Tecnologia, Brazil); João Vitor da S. Campos (Sidia Institute of Science and Technology, Brazil)
12:30:00 PM	2:30:00 PM	**Lunch**	
2:30:00 PM	3:00:00 PM	**Industry Talk, Inoa**	
3:00:00 PM	4:00:00 PM	TS6 — RAN, MEC & Open RAN Platforms	**O-RAN Testbeds: From Experimental Deployments to Simulation Frameworks** – Juan Navarro (Universidad de la República, Uruguay); Alberto Castro (Universidad de la República, Uruguay); Claudina Rattaro (Universidad de la República, Uruguay)
			ns3-oran-customizable-db: A Tool for Building a Customizable Database for Open RAN Simulations – Felipe Gomes Táparo (UFRJ, Brazil); Igor Monteiro Moraes (Universidade Federal Fluminense, Brazil); Miguel Elias M Campista (Federal University of Rio de Janeiro & GTA, Brazil)
			On the Impact of Cache Server Selection Policies in Multi-Access Edge Computing Networks – Leonardo Fiorio Soares (Instituto Federal do Espírito Santo, Brazil); Ian Vilar Bastos (Universidade do Estado do Rio de Janeiro, Brazil); Igor Monteiro Moraes (Universidade Federal Fluminense, Brazil)
4:00:00 PM	4:30:00 PM	**Coffee Break**	
4:30:00 PM	6:00:00 PM	SPTS3 — AI, ML and Security in 5G/6G Networks	**Evaluation of EAP Usage for Authenticating Wi-Fi Enterprise Users in 5G Networks** – Leonardo Azalim de Oliveira (Federal University of Juiz de Fora, Brazil); André de Oliveira (Federal University of Juiz de Fora, Brazil); Edelberto Franco Silva (Universidade Federal de Juiz de Fora, Brazil)
			An Empirical Study of the Current Usage Levels of Wi-Fi Channels – Fernanda G. O. Passos (Instituto Superior de Engenharia de Lisboa, Portugal & COPELABS - Universidade Lusófona, Portugal); Diego Passos (Instituto Superior de Engenharia de Lisboa, Portugal)
			Machine Learning for Mirai Attack Detection in 5G-Enabled IoT Networks – Michael Zancanella (Federal University of Juiz de Fora, Brazil); Edelberto Franco Silva (Universidade Federal de Juiz de Fora, Brazil); Alex Borges Vieira (Universidade Federal de Juiz de Fora, Brazil); Rodrigo Mendes Peixoto (Universidade Federal de Juiz de Fora, Brazil); Marcos Stenner (Federal University of Juiz de Fora, Brazil)
			Correlation-based Detection using SVM in Ambient Backscatter Communications – Aobakwe J Makgarapa (Loughborough University, United Kingdom (Great Britain) & Arrow Industrial, Botswana); Sangarapillai Lambotharan (Loughborough University, United Kingdom (Great Britain)); Mahsa Derakhshani (Loughborough University, United Kingdom (Great Britain))
			Trapezoidal Log-Periodic Printed Antenna for the Digital TV as an Internet-of-Things Device – Vitor Luiz Gomes Mota (Universidade Federal Fluminense, Brazil); Gabriel Vellasco (Universidade Federal Fluminense, Brazil); Rodrigo Oliveira (UFF, Brazil); Vanessa Magri (Universidade Federal Fluminense - UFF, Brazil); Roberto B. Di Renna (Universidade Federal Fluminense, Brazil); Tadeu N Ferreira (Fluminense Federal University, Brazil); Maurício Weber (Universidade Federal Fluminense, Brazil & Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, Brazil); Pedro Gonzalez Castellanos (Federal Fluminense University, Brazil); Leni Matos (Fluminense Federal University, Brazil)
			Evaluating Formation Metrics in Autonomous UAV Swarms Using Raft under Communication Constraints – Laércio Lucchesi (Pontifícia Universidade Católica do Rio de Janeiro, Brazil); Markus Endler (Pontifícia Universidade Católica do Rio de Janeiro, Brazil); Bruno Jose Olivieri de Souza (Pontifícia Universidade Católica Do Rio de Janeiro & Laboratory of Advanced Collaboration, Brazil)
			An efficient RIS selection and resource block allocation algorithm for mmWave NOMA systems – Souvik Deb (Indian Statistical Institute, Kolkata, India); Sasthi C. Ghosh (Indian Statistical Institute, India); Shankar Kumar Ghosh (Shiv Nadar Institution of Eminence Deemed to Be University, India)
6:00:00 PM	6:15:00 PM	**Closing Ceremony**	

Social Events

All technical activities will take place in the **Auditorium of the Instituto de Computação**. **Coffee breaks** will be held at the **NAB Porch**. **Lunch** and the **Welcome Reception** will take place on the **NAB Rooftop**.

Please keep in mind that, for safety reasons, you must wear pants to access the NAB rooftop.

The **Conference Dinner** will take place on the **Mocellin Churrascaria,** starting at 7:00 PM. The address is Av. Quintino Bocaiúva 151, S. Francisco.



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