

CommNet'25 Program

(* Note: All times are Morocco local time (GMT+01))

Wednesday December 3, 2025				
08:15-09:00	Registration			
09:00-09:30	Opening Ceremony			
09:30-10:15	<p>Keynote Speaker 1: Prof. Pascal Lorenz, University of Haute-Alsace, France.. Title: “<i>Architectures of Next Generation Wireless Networks</i>” Session Chair: Prof. George K. Karagiannidis, Aristotle University of Thessaloniki, Greece</p>			
10:15-10:45	Coffee break			
10:45-12:00	<p>Tutorial 1 : “<i>Semantic Communication in the 6G Era</i>” Presenter : Prof. Mehdi Bennis, University of Oulu, Finland Session Chair: Prof. Young-Chai Ko, Korea University, Korea</p>			
12:00-14:00	Lunch			
14:00-15:25	Technical Sessions			
	<p>Session I <i>Networking and Security 1</i> Session Chair: Prof. Anass Sebbar, UIR, Rabat, Morocco</p>	<p>Session II <i>PHY & Performance Analysis 1</i> Session Chair: Dr. Rula Ammuri, Professionals for Smart Technology, Jordan</p>	<p>Session III <i>Artificial Intelligence and Smart Applications 1</i> Session Chair: Prof. Ouassim Karrakchou, UIR, Rabat, Morocco</p>	<p>Session IV <i>Artificial Intelligence and Smart Applications 2</i> Session Chair: Prof. Mohamed Chergui, CRMEF, RSK, Morocco</p>
15:25-16:10	<p>Keynote Speaker 2 : Prof. Young-Chai Ko, Korea University, Korea. Title: “<i>Free Space Optical Communications: Enabling High-Speed Connectivity from Space to Servers</i>” Session Chair: Prof. Bisma Smida, University of Illinois at Chicago, USA.</p>			
16:10-16:30	Coffee break			
16:30-18:00	<p>Panel: “<i>The Connected Sky: Unlocking Economic Potential in Low-Altitude Airspace</i>”</p> <ul style="list-style-type: none"> • Panel Moderator: Prof. Mohamed-Slim Alouini, KAUST, Kingdom of Saudi Arabia <p><u>Panelists:</u></p> <ul style="list-style-type: none"> • Prof. Adam Cohen, Transportation Sustainability Research Center, UC Berkeley • Prof. Yanbo Huang, Research Agricultural Engineer, US Department of Agriculture Agricultural Research Service • Prof. Baha Eddine Youcef Belmekki, Heriot-Watt University, Edinburgh, UK • Prof. Weijie Yuan, Southern University of Science and Technology 			

Thursday December 4, 2025			
09:00-10:30	Technical Sessions		
	Session V <i>Networking and Security 2</i> Session Chair: Prof. Othmane Cherqi, UIR, Rabat, Morocco	Session VI <i>PHY & Performance Analysis 2</i> Session Chair: Prof. Idriss Chana, EST, Moulay Ismail University, Morocco	Session VII <i>Artificial Intelligence and Smart Applications 3</i> Session Chair: Prof. Abdelalim Sadiq, Ibn Tofail University, Morocco
10:30-10:50	Coffee Break		
10:50-11:35	Keynote Speaker 3: Prof. Besma Smida, University of Illinois at Chicago, USA Title: “ <i>Full-duplex Integrated sensing and communication: A Communication Theory Perspective.</i> ” Session Chair: Prof. Mohammed Boulmalf, International University of Rabat, Morocco		
11:35-12:20	Keynote Speaker 4 : Prof. Ana Perez-Neira, Polytechnic University of Catalonia, Spain Title: “ <i>Learning in the Air: Smarter Terrestrial and Non-Terrestrial Networks with Efficient Access and Waveforms</i> ” Session Chair: Prof. Pascal Lorenz, University of Haute-Alsace, France		
12:20-14:00	Lunch		
14:00-16:00	Technical Sessions		
	Session VIII <i>Internet of Thing 1</i> Session Chair: Prof. Hassan El Ghazi, INPT, Rabat, Morocco	Session IX <i>PHY & Performance Analysis 3</i> Session Chair: Prof. Mohamed Et-tolba, INPT, Rabat, Morocco	Session X <i>Artificial Intelligence and Smart Applications 4</i> Session Chair: Prof. Hakim Hafidi, UIR, Rabat, Morocco
16:00-16:30	Coffee Break		
16:30-18:00	Tutorial 2: “ <i>Using Lasers for Communications and Energy Transmission in Non-Terrestrial Networks.</i> ” Presenters : <ul style="list-style-type: none"> • Prof. Mohamed-Slim Alouini, KAUST, Kingdom of Saudi Arabia. • Prof. Muhammad Salman Bashir, School of Computing and Engineering, University of Huddersfield, Huddersfield, U.K. Session Chair: Prof. Ana Perez-Neira, Polytechnic University of Catalonia, Spain		
19:00	Gala Dinner		

Friday December 5, 2025 (Online Sessions)	
09:00-10:30	Technical Session Session XII <i>Networking and Security 3</i> Session Chair: Prof. Yassine Maleh, ENSA Khouribga - Sultan Moulay Slimane University, Béni Mellal, Morocco
10:30-12:00	Technical Session Session XIII <i>Performance Analysis 5</i> Session Chair: Prof. Yassine Mouchtak, Mohammed V University in Rabat
12:00-14:00	Break/Lunch
14:00-15:50	Technical Session Session XIV <i>Artificial intelligence, Smart Applications, and Networking 5</i> Session Chair: Prof. Souad Labghough, Faculty of Sciences, Ibn Zohr University, Morocco
15:50-17:20	Technical Session Session XV <i>Networks & Performance Analysis 6</i> Session Chair: Prof. Toufik Chaayra, Pluridisciplinary Faculty of Nador, Mohammed I University, Morocco
17:20	Closing Ceremony

Detailed Program

Wednesday December 3, 2025

Registration - (08:15-09:00)

Opening Ceremony - (09:00-09:30)

- **Prof. Abdelaziz Benjouad**, Vice-President for Research, Innovation and Partnerships, UIR, Rabat
- **Prof. Oum El Kheir Abra**, Dean of CRMEF, Rabat-Salé-Kénitra, Morocco
- **Prof. Mohamed Sahabi**, Dean of Pluridisciplinary Faculty of Sidi Bennour, Morocco
- **Prof. Faissal El Bouanani**, ENSIAS, Mohammed V University of Rabat, Morocco (**General Chair**)
- **Prof. Mohamed-Slim Alouini**, King Abdullah University of Science and Technology, Kingdom of Saudi Arabia (**Steering Committee Chair**)
- **Prof. George K. Karagiannidis**, Aristotle University of Thessaloniki, Greece (**Steering Committee Chair**)
- **Prof. Fouad Ayoub**, CRMEF, Rabat-Salé-Kénitra, Morocco (**General Co-Chair**)
- **Prof. Khalid Qaraqe**, Hamad Bin Khalifa University, Qatar (**TPC Chair**)

Keynote Speaker 1- (09:30-10:15) - Room 1

- **Keynote Speaker 1:** Prof. Pascal Lorenz, University of Haute-Alsace, France.
- **Title:** “*Architectures of Next Generation Wireless Networks*”
- **Session Chair:** Prof. George K. Karagiannidis, Aristotle University of Thessaloniki, Greece

Coffee Break- (10:15-10:45)

Tutorial 1- (10:45-12:00) - Room 1

- **Tutorial 1:** “*Semantic Communication in the 6G Era*”
- **Presenter:** Dr. Mehdi Bennis, University of Oulu, Finland
- **Session Chair:** Prof. Young-Chai Ko, Korea University, Korea.

Lunch- (12:00-14:00)

Session I (Room 1) - (14:00-15:25): Networking and Security 1

Session Chair: Prof. Anass Sebbar, UIR, Rabat, Morocco.

1571203831: “**Dynamic RAN Network Slicing Optimization via Hierarchical Reinforcement Learning**” Jietao Zhao (Loughborough University, United Kingdom); Xiaolan Liu (University of Bristol, United Kingdom); Sangarapillai Lambotharan (Loughborough University, United Kingdom)

1571184587: “**Cryptanalysis of Krouk-Kabatiansky-Tavernier Cryptosystem**” Fedor Ivanov (National Research University Higher School of Economics & Institute for Information Transmission Problems, Russia); Kirill Yakushenoks (HSE University, Russia); Artemiy Rudzyanskiy (National Research University Higher School of Economics, Russia)

1571200500: “**Distributed Multi-Link Operation (MLO) for Frame Replication in Wireless Time-Sensitive Networking**” Jetmir Haxhibeqiri; Pablo Avila-Campos, Thijs Havinga, Ingrid Moerman and Jeroen Hoebeke (Ghent University - IMEC, Belgium)

Session II (Room 2) - (14:00-15:25): PHY & Performance Analysis 1

Session Chair: Dr. Rula Ammuri, Professionals for Smart Technology, Jordan

1571189803 : “A General I-Function Performance Analysis Framework for THz-Based 6G Communications” Oussama Ihnib and Mustapha Benjillali (National Institute of Posts and Telecommunications, Rabat, Morocco); Khaled M Rabie (King Fahd University of Petroleum and Minerals (KFUPM), Saudi Arabia); Osamah S. Badarneh (German Jordanian University, Jordan)

1571224562: “RIS-Aided Covert Communication in Two-Way DF Relays Under Adversarial Joint-Warden Detection” Imane Guerrab and Faissal El Bouanani (ENSIAS, Mohammed V University in Rabat, Morocco); Fouad Ayoub (CRMEK, RSK, Morocco)

1571202914 : “Tag-Based Physical Layer Authentication over a Nakagami- m Block-Flat Fading Channel: Theory and GNU Radio Simulations for IIoT” Ewan Gencsek; Patrice Mégret and Véronique Moeyaert (Faculté Polytechnique, Université de Mons (UMONS), Belgium)

1571211676: “Towards Resilient RANs Through UAV Integration: Landing Positioning Strategy During Blackouts” Aurora Martiny, Michela Meo, Daniela Renga and Greta Vallero (Politecnico di Torino, Italy)

1571211311: “Comparison of 802.11ax and 802.11ac WLAN at 5 GHz with 160 MHz Channel Width” Samad Salehi Kolahi; Haotian Tang and Maloni Tuitupou (Unitec, New Zealand)

Session III (Room 3) - (14:00-15:25): Artificial Intelligence and Smart Applications 1

Session Chair: Prof. Ouassim Karrakchou, UIR, Rabat, Morocco

1571199172 : “Reinforcement Learning Attack in Cybersecurity Investments” Fatima Zahra Moussa (Laboratory SSLab, ENSIAS, Mohammed V University in Rabat, Morocco); Khalid Zine-Dine (Mohammed V University in Rabat, Morocco)

1571201222: “Bin2Vec: Interpretable and Auditable Multi-View Binary Analysis for Plagiarism Detection” Moussa Moussaoui (Faculty of Sciences IbnTofail University, Morocco); Tarik Houichime (Mohammed V University in Rabat, Morocco); Abdelalim Sadiq (Faculty of Sciences IbnTofail University, Morocco)

1571204424: “Uncovering the Drivers of Global Educational Performance: A Machine Learning-Based Analysis of PISA Scores” Ilyas Tammouch (Ibn Tofail University, Morocco); Abdelamine Elouafi (, Morocco); Soumaya Nouna and Assia Nouna (Hassan First University, Morocco); Ibtissam Essadik and Imane Laassar (University of Ibn Tofail, Morocco)

1571211768: “Learning to Count Targets from Dual-Window: A CNN Approach for OFDM ISAC” Ali Al Khansa (Orange Labs, France)

Session IV (Room 4) - (14:00-15:25): Artificial intelligence, Smart Applications, and Networking 2

Session Chair: Prof. Mohamed Chergui, CRMEF, RSK, Morocco.

1571204197: “Edge Computing Based Resource Management for Congestion Control in Indoor Multi-UAV Mobile Networks” Zarrar Haider (Brookfield Villages, Ireland & UCC, Ireland); Cormac J. Sreenan and Kenneth N Brown (University College Cork, Ireland)

1571218279: “Hybrid Quantum-Classical Machine Learning for Cyber Threat Detection: A Comparative Assessment of Quantum Kernel and Variational Quantum Circuit Techniques” Mohammed Khaldoune (ENSAK, Ibn Tofail University, Kenitra, Morocco); Samia El Haddouti (Mohammed V University, Morocco); Habiba Chaoui (ENSA, Ibn Tofail University, Morocco)

1571219772: “Modern AI-Based Optimization Strategies for Secure and Green Blockchain Systems: A Systematic Study” Salma Boulija (EST, Ibn Tofail University, Kenitra, Morocco); Samia El haddouti (Mohammed V University, Morocco); Habiba Chaoui (ENSA, Ibn Tofail University, Morocco)

1571219672: “Federated Learning for Decentralized Cyber Defense: A Systematic Review of Emerging Trends and Open Challenges” Zineb Choukrani (EST, Ibn Tofail University, Kenitra, Morocco); Samia El haddouti (Mohammed V University, Morocco); Habiba Chaoui (ENSA, Ibn Tofail University, Morocco)

Keynote Speaker 2- (15:25-16:10) - Room 1

- **Keynote Speaker 2 :** Prof. Young-Chai Ko, Korea University, Korea.
- **Title:** “*Free Space Optical Communications: Enabling High-Speed Connectivity from Space to Servers*”
- **Session Chair:** Prof. Bisma Smida, University of Illinois at Chicago, USA.

Coffee Break- (16:10-16:30)

Panel - (16:30-18:00) - Room 1: “The Connected Sky: Unlocking Economic Potential in Low-Altitude Airspace”

- **Panel Moderator:** Prof. Mohamed-Slim Alouini, KAUST, Kingdom of Saudi Arabia

Panelists:

- Prof. Adam Cohen, Transportation Sustainability Research Center, UC Berkeley
- Prof. Yanbo Huang, Research Agricultural Engineer, US Department of Agriculture, Agricultural Research Service
- Prof. Baha Eddine Youcef Belmekki, Heriot-Watt University, Edinburgh, UK
- Prof. Weijie Yuan, Southern University of Science and Technology

Thursday December 4, 2025

Session V (Room 1) - (09:00-10:30): Networking and Security 2

Session Chair: Prof. Othmane Cherqi, UIR, Rabat, Morocco

1571201696: “**Federated Learning for Collaborative Cyber-Attack Detection in Internet of Vehicles (IoV)**

Network” Obrina Candra Briliyant and Muhammad Yusuf Bambang Setiadji (Cardiff University, United Kingdom (Great Britain))

1571204199: “**Inter-Cell Interference Management for Massive MIMO Networks: A Multi-Armed Bandit**

Approach” Duc Huu Do (Avignon University, France & Orange Labs, France); Zwi Altman and Antoine Dejonghe and Marie Masson (Orange Research, France); Francesco De Pellegrini (University of Avignon, France)

1571204579: “**Private Key Fragments Secure Recovery Approach in Passkeys System Based on Blockchain**

Technology and Error-Correcting Codes” Assane Ilboudo; Didier Bassolé and Desire Guel (Université Joseph Kl ZERBO, France)

1571214197: “**MalExplainer: An Explainable Ensemble Learning Framework for Malware Detection**” Loubna

Moujoud; Meryeme Ayache; Abdelhamid Belmekki (National Institute of Posts and Telecommunications, Morocco)

1571204761: “**Some New Quantum Codes and LCD Codes over the Ring T**” Mohammed Sabiri (Moulay Ismail

University, Morocco)

Session VI (Room 2) - (09:00-10:30): PHY & Performance Analysis 2

Session Chair: Prof. Idriss Chana, EST, Moulay Ismail University, Morocco

1571203798: “**Adaptive Dual-Windowing Strategies for Multi-Target Detection in OFDM ISAC**” Ali Al Khansa

(Orange Labs, France); Youssef Bahannis (Orange, France)

1571204170: “**Spectral Efficiency Optimization for Nonlinear Hybrid RIS OFDM Systems**” Brahim Elmaroud

(Institut Supérieur d'Etudes Maritimes - Casablanca, Morocco & Mohammed V University in Rabat, Morocco);

Said Ousguine (Faculty of Science, University Mohammed 5 Rabat- Agdal, Morocco)

1571204672: “**A Gamma Distribution-Based Approximation for Interference Modeling in Non-Terrestrial**

Networks” Islam Mohammad Tanash (Prince Mohammad Bin Fahd University, Saudi Arabia)

1571211680: “**Performance Analysis of Multi-Beam HAP Networks with Spatially Random Users**” Islam

Mohammad Tanash (Prince Mohammad Bin Fahd University, Saudi Arabia); Fatemeh Rafiei Maleki and Taneli Riihonen (Tampere University, Finland)

1571204614: “**Beamforming Optimization for Secure THz ISAC Systems**” Hajar Miskar (Mohammed 5,

Morocco); Faissal El Bouanani (ENSIAS, Mohammed V University in Rabat, Morocco); Elmehdi Illi (Hamad Bin Khalifa University, Qatar)

Session VII (Room 3) - (09:00-10:30): Artificial Intelligence and Smart Applications 3

Session Chair: Prof. Abdelalim Sadiq, Ibn Tofail University, Morocco.

1571204434: “Reinforcement Learning with Attention for Dynamic Spectrum Access in Optical Networks”
Abdelrahman Elfikky (University of Arkansas, USA); Zain Ali (HBKU Qatar, Qatar); Zouheir Rezki (University of California Santa Cruz, USA); Youssef Boumhaout (African Leadership Academy, South Africa)

1571204820: “BF-WeakWeb-2025: A Novel Dataset and LLM Benchmark for Web Vulnerability Detection in Burkina Faso”
Sidwendluian Romaric Nana; Didier Bassolé and Desire Guel (Université Joseph KI ZERBO, France); Oumarou Sié (University Ouaga 1 Professeur Joseph Ki-Zerbo, Burkina Faso)

1571211806: “Methods for Selecting the Number of Clusters (K) in K-Means Clustering for Multicontroller Placement in Software-Defined Networking (SDN): Impact on Latency and Load Balancing”
Aymen Chentouf; Mounia Miyara and Zouhair Chiba (Hassan II University, Morocco)

1571210951: “Optimize Energy Efficiency in 5G Network Slicing Using Deep Q-Learning”
Fayza Rizka Zalianty, Sofia Hertiana and Helni Jumhur (Telkom University, Indonesia)

Coffee Break - (10:30-10:50)

Keynote Speaker 3 (10:50-11:35) - Room 1

- **Keynote Speaker 4:** Prof. Bisma Smida, University of Illinois at Chicago.
- **Title:** “*Full-duplex Integrated sensing and communication: A Communication Theory Perspective*”
- **Session Chair:** Prof. Mohammed Boulmalf, International University of Rabat, Morocco

Keynote Speaker 4- (11:35-12:20) - Room 1

- **Keynote Speaker 4 :** Prof. Ana Perez-Neira, Polytechnic University of Catalonia, Spain
- **Title:** “*Learning in the Air: Smarter Terrestrial and Non-Terrestrial Networks with Efficient Access and Waveforms*”
- **Session Chair:** Prof. Pascal Lorenz, University of Haute-Alsace, France

Lunch - (12:20-14:00)

Session VIII (Room 1) - (14:00 -16:00): Internet of Thing 1

Session Chair: Prof. Hassan El Ghazi, INPT, Rabat, Morocco

1571211773: “Lightweight Energy- and Link-Aware Q-Learning Routing for Underwater Acoustic Sensor Networks” Hamza Zradgui; Khalil Ibrahim and Mohammed Jouhari (Ibn Tofail University, Morocco)

1571210002: “Lightweight Intrusion Detection in IoT via SHAP-Guided Feature Pruning and Knowledge-Distilled Kronecker Networks” Hafsa Benaddi and Mohammed Jouhari (Ibn Tofail University, Morocco); Nouha Laamech and Anas Motii (Mohammed VI Polytechnic University, Morocco); Khalil Ibrahim (University of Ibn Tofail, Morocco)

1571211184: “Incentive Mechanism for IoT Participation in Federated Learning: An Energy-Aware Perspective” Sara Arabi (Edvantis Higher Education Group, ISGA, Morocco); Amal Hadri (Edvantis Higher Education Group, ISGA Rabat, Morocco)

1571215343: “Development of an AI-Powered Vision and IoT-Enabled Real-Time Dashboard for the Smart Box Monitoring System” Mohamed Abou Zour (National School of Applied Sciences, Morocco); Youssef Gahi (University Ibn Tofail, Morocco); Jihane Gharib (UIT Kenitra, Morocco)

1571211785: “A Computational Intelligence and Mobile Sink-Based Approach to Optimizing IoT Sensor Network Longevity” Khalid A. Darabkh and Ahmad O. Khawaldeh (The University of Jordan, Jordan)

1571207330: “Improving Arterial Tree Classification in 3D MRA Using Feature Selection and Machine Learning” Ibtissam Essadik (Ibn Tofail University, Morocco)

1571211572: “Graph Neural Network Framework for Advanced Persistent Threat Detection in IIoT Environments” Kaouthar Merzouki and Youssef Hadi and Hassan El Ghazi (National Institute of Posts and Telecommunications (INPT), Morocco); Hajar Moudoud (Universite de Sherbrooke, Canada); Zakaria Abou El Houda (INRS, Canada)

Session IX (Room 2) - (14:00-16:00): PHY & Performance Analysis 3

Session Chair: Prof. Mohamed Et-tolba, INPT, Rabat, Morocco

1571204384: “Wideband Circularly Polarized PMA with Fractal AMC Metasurface for 5G-IoT and CubeSat Applications” Mohamed El Hammoumi (Sidi Mohamed Ben Abdellah University Fez, Morocco); Faisal EM Tubbal (University of Wollongong, Australia & The Libyan Center for Remote Sensing and Space Science, Libya); Najiba El Idrissi El Amrani (University of Sidi Mohamed Ben Abdellah - FST, Morocco); Raad Raad (University of Wollongong, Australia); Akrem Alkaseh (Libyan Centre for Remote Sensing and Space Science, Libya); Adel Ashyap (University of Wollongong, Australia)

1571204841: “Interference-Aware Joint User Association and Resource Allocation” Elisa Bin; Gabor Fodor and Jonas Mårtensson (KTH Royal Institute of Technology, Sweden)

1571210293: “Interference Mitigation in Automotive mmWave Radar Systems Using a Complex-Valued ConvMixer” Yudai Suzuki and Xiaoyan Wang (Ibaraki University, Japan); Lin Shan (Shinshu University, Japan); Masahiro Umehira (Nanzan University, Japan & Ibaraki University, Japan)

1571204714: “Semantic Underwater Optical Wireless Communication Using Variational Autoencoders” Mohamed Nennouche and Ali Khalighi (Ecole Centrale Méditerranée, France); Alexis Alfredo Dowhuszko (Aalto University, Finland); Djamel Merad (Aix Marseille University, France)

1571215339: “Quantum and LCD Codes from the Constacyclic Codes Derived from the Ring R” Mohammed Sabiri and Aouijil Bassou (Moulay Ismail University, Morocco)

1571204850: “Laryngoscope Image Data Acquisition System with Compressive Sensing Using Complex Wavelet Transform and DCT Method for Healthcare Applications” Ida Wahidah, Husneni Mukhtar and Muhammad Ibrahim (Telkom University, Indonesia)

Session X (Room 3) - (14:00 -16:00): Artificial Intelligence and Smart Applications 4

Session Chair: Prof. Hakim Hafidi, UIR, Rabat, Morocco

1571208744: "Toward Intelligent Core Networks: Analytical QoS Modeling and Reinforcement Learning for 4G Vs 5G" Jussif Junior Abularach Arnez and Maria Gabriela Lima Damasceno (Sidia Institute of Science and Technology, Brazil); Jéssica Da Silva Gomes (UEA, Brazil); Walmir Acioli; Carla Lapa Nogueira and Maysa Jhiovanna Dalvino Marques (Sidia Institute of Science and Technology, Brazil)

1571210747: "A Distributed and Smart Scheduling Algorithm for Residential Demand-Side Management in EV-Integrated Smart Grids " Amjad Gawanmeh, Shadi Atalla, Hamzah Ali Alkhazaleh and Alavikunhu Panthakkan (University of Dubai, United Arab Emirates); Sa'ed Abed (Kuwait University & College of Engineering and Petroleum, Kuwait)

1571211217: "Machine Learning Driven Threat Identification in X/Twitter: A Comparative Analysis" Anass Bekar; Zakaria El Allali; Ikram Hamdaoui; El Makkaoui (Mohammed First University, Morocco)

1571211647: "High Field-of-View Imaging Receiver Design Using SPAD or PD Arrays" Mohamad Hijazi (The University of Edinburgh, United Kingdom (Great Britain)); Mohammad Dehghani (Amirkabir University of Technology, Iran); Harald Haas (University of Cambridge, United Kingdom (Great Britain)); Majid Safari (University of Edinburgh, United Kingdom (Great Britain))

1571211404: "A Novel Approach Combining Physics-Informed Neural Networks and Parabolic Equations for Maritime Propagation Modeling" Zoubair Alimouch; Mohamed Et-tolba and Najib Naja (Institut National des Postes et Télécommunications, Morocco)

Session XI (Room 4)- (14:00-16:00): Advanced Modeling, AI and Digital Systems

Session Chair: Prof. Abdelmajid Bessate, Chouaïb Doukkali University El Jadida, Morocco

Workshop on Mathematical Modeling and Optimization for Engineering Problems

1571203800: “Jamming Detection and Classification on Physical Layer with a Minimized CNN Model” Lucas Fink, Torsten Reissland, Timo Maiwald and Norman Franchi (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany)

Workshop on Digital and Intelligence Systems Engineering (WDISE'25)

1571210903: “Cybersecurity Investments and Cyberattacks in Watts-Strogatz Networks” Fatima Zahra Moussa (ENSIAS, Mohammed V University in Rabat, Morocco); Khalid Zine-Dine (Faculty of Sciences, Mohammed V University in Rabat, Morocco)

1571211815: “Multi-Layered Biometric Obfuscation (MLBO): Enhancing Security in Facial Recognition Systems” Nouredine Ouninisse (Faculty of Sciences, Mohammed V University in Rabat); Ayoub Lahmidi (Polydisciplinary Faculty of Sidi Bennour, Chouaib Doukkali University); Marouane Nazih (Faculty of Sciences, Moulay Ismail University, Morocco); Brahim Jabir (Polydisciplinary Faculty of Sidi Bennour, Chouaib Doukkali University, Morocco); Minaoui Khalid (Faculty of Sciences, Mohammed V University in Rabat)

1571211927: “Towards Efficient Irrigation: Machine LearningBased Water Level Forecasting” Safae Mougare and Hassan Saadaoui (Chouaib Doukkali University, Morocco); Abouelmehdi Karim (Mohammed V University, Morocco)

1571219218: “Effective Capacity of Selection Combining for AF Relaying Protocol Subject to Independent Weibull Fading Channels” Abdelmajid Bessate (Chouaib Doukkali University, Morocco); Faissal El Bouanani (ENSIAS, Mohammed V University in Rabat, Morocco)

1571211795: “Facial Expression Recognition with Combined Eye-Mouth ROI Extraction Using Facial Landmarks and CNN” Hassan Afifi, Idriss Chana, Aziz Bouazi, Mostafa Merras, and Abdallah Marhraoui Hsaini (ESTM Moulay Ismail University, Meknes, Morocco)

Coffee Break - (16:00-16:30)

Tutorial 2- (16:30-18:00) - Room 1

- **Title :** “*Using Lasers for Communications and Energy Transmission in Non-Terrestrial Networks*”
- **Presenters :**
 - Prof. Mohamed-Slim Alouini, KAUST, Kingdom of Saudi Arabia
 - Muhammad Salman Bashir, School of Computing and Engineering, University of Huddersfield, Huddersfield, U.K.
- **Session Chair:** Prof. Bisma Smida, University of Illinois at Chicago

Gala Dinner - 19:00

Friday December 5, 2025 (Online)

Session XII- (09:00 -10:30): Networking and Security 3

Session Chair: Prof. Yassine Maleh, ENSA Khouribga - Sultan Moulay Slimane University, Béni Mellal, Morocco

1571211801: “Modified Hyper Parameter Optimization for Enhancing Intrusion Detection in Industrial-Internet of Things” Imane Laassar; Ilyas Tammouch; Abdelamine Elouafi and Asmaa Amzali (Ibn Tofail University, Kenitra, Morocco)

1571193849: “Blockchained Federated Learning for Secure and Privacy-Preserving Internet of Vehicles: A Comprehensive Review” Adil Attiaoui and Abdellatif Kobbane (ENSIAS, Mohammed V University in Rabat, Morocco); Marwane Ayaida (University of Reims, France); Mouna Elmachkour (University Mohammed V of Rabat, Morocco); Yassin El Hilali (UPHF, France)

1571206401: “A Posteriori Error Estimates for Elliptic Problems Approximated by the Mortar Finite Volume Method” Ali Ennori (National School of Applied Sciences, Ibn Tofail University, Morocco)

1571207185: “Adaptive K-Means Clustering for Energy Optimization in Wireless Sensor Networks Using Calinski-Harabasz Index” Hilmani Adil (Higher School of Technology (EST, Mohamed V University, Morocco); Abderrahim Maizate (ENSEM, University Hassan II & University Chouaib Doukkali, Morocco); Fouad Ayoub (CRMEK, RSK, Morocco); Siham Aouad (ENSIAS, Mohamed V University, Morocco); Yassine Sabri (Lab-STICC, France)

1571204549: “UAV-Assisted HetNets with RSMA: Spectrum-Sharing Clusters and Security-Aware Design” Dina Sherif and Ahmed E. El-Mahdy (German University in Cairo, Egypt)

1571202335: “6G Co-Existence with Incumbent THz Spectrum Users” Tonna C. Aguolu (King's College London, United Kingdom)

Session XIII - (10:30-12:00)

Performance Analysis 5

Session Chair: Dr. Yassine Mouchtak, Mohammed V University in Rabat

1571198387: “Achievable Rates of Full Duplex Cooperative Relay Selection-Based Machine Learning” Widad Belaoura (Université M'hamed Bougara Boumerdès, Algeria); Saud Althunibat (Al-Hussein Bin Talal University, Jordan); Mazen Omar Hasna (Qatar University, Qatar); Khalid A. Qaraq (Hamad Bin Khalifa University, Qatar); Rula Ammuri (Professionals for Smart Technology, Jordan)

1571198321: “Multi-Head PPO for Joint Resource Allocation in FSO-RF Space-Air-Ground Networks” Zain Ali (Hamad Bin Khalifa University, Qatar); Rula Ammuri (Professionals for Smart Technology, Jordan); Mazen Omar Hasna (Qatar University, Qatar); Khalid Qaraq (Hamad Bin Khalifa University, Qatar)

1571204652: “Range-Invariant Time-Varying Phased Array for Autonomous Electronic Angular Scanning in Wireless and Sensing Systems” Dylan Flejszon, Mostafa Rahbar and Nabih Jaber (Lawrence Technological University, USA)

1571206507: “A Spatio-Temporal Domain Analysis on Orbital Angular Momentum Carrying Beams” Chathuranga Liyanage, Dilan Nissanka and Navodika Karunasingha (University of Ruhuna, Sri Lanka); Eranda Jayatunga (University College Dublin, Ireland & University of Ruhuna, Sri Lanka); Najath Akram Mohamed (Jabil Inc, USA)

1571204616: “Preamble Design for Joint Acquisition and Medium Access in Wireless Networks with Multiple Antenna Beamforming” Diego Kaulen, Bowen Fan, Carlos Feres and Christian Oberli (Pontificia Universidad

Session XIV- (14:00 -15:50): Artificial intelligence, Smart Applications, and Networking 5

Session Chair: Prof. Souad Labghough, Faculty of Sciences, Ibn Zohr University, Morocco

1571204591: “A Deep Hybrid CNN Architecture That Merges 2D and 3D Convolutions to Enhance Land Cover Mapping” Assia Nouna and Soumaya Nouna (Hassan First University, Morocco); Ilyas Tammouch and Abdelamine Elouafi (Ibn Tofail University, Morocco)

1571204431: “Solving the Variable-Coefficient Helmholtz Using an Artificial Neural Network Approach” Soumaya Nouna and Assia Nouna (Hassan First University, Morocco); Ilyas Tammouch (Ibn Tofail University, Morocco); Abdelamine Elouafi (Ibn Tofail University University, Morocco); Nabil Benjaa (University of Sherbrooke, Canada)

1571204673: “Communication-Efficient Federated Learning via Adaptive Single-Layer Transmission” Sana Khaji; Yann Ben Maissa and Rachid EL Mokadem (National Institute of Posts and Telecommunications, Rabat, Morocco)

1571204451: “Detecting Key Indicators of Student Concentration in Mathematics Using TIMSS 2023 Data: An Explainable Machine Learning Approach” Abdelamine Elouafi (Ibn Tofail University, Morocco); Ilyas Tammouch (Ibn Tofail University, Morocco); Soumaya Nouna and Assia Nouna (Hassan First University, Morocco); Imane Laassar (Ibn Tofail University, Morocco)

1571210395: “Explainable Fault Detection in Electrical Power Systems” Wassila Lalouani (Towson University, USA)

1571204758: “Comprehensive Cross-Dataset Evaluation Framework for Machine Learning-Based Intrusion Detection Systems: A Robust Multi-Metric Validation Approach”, Amal Hadri and Sara Arabi (Edvantis Higher Education Group, ISGA, Morocco)

1571211805: “Efficiency Analysis of CNNs and Vision Transformers for Edge-Based- Plant Disease Detection” Imane Bouchnafa and Mohamed Amnai (Ibn Tofail University, Morocco)

Session XV - (15:50-17:20)

Networks & Performance Analysis 6

Session Chair: Prof. Toufik Chaayra, Pluridisciplinary Faculty of Nador, Mohammed I University, Morocco

1571204654: “TVPA for Simultaneous Beam Training and Data Transmission” Dylan Flejszon, Mostafa Rahbar and Nabih Jaber (Lawrence Technological University, USA)

1571204656: “Directional Frame Delivery and Sector-Based Scheduling Using a Time-Varying Phased Array” Dylan Flejszon, Mostafa Rahbar and Nabih Jaber (Lawrence Technological University, USA)

1571210001: “Uplink Decoupling for Industrial IoT in 5G Networks: Performance Evaluation and Deployment Considerations” Charalampos Chatzigeorgiou; Christos J Bouras and Vasileios Kokkinos (University of Patras, Greece); Apostolos Gkamas (University of Ioannina, Greece); Philippos Pouyioutas (University of Nicosia, Cyprus)

1571211314: “A Modular Testbed for Integrated Satellite-Terrestrial Networks” Murat Ahmet Parlakisik and Ertan Öztürk (University of North Dakota, USA)

1571211294: “Adaptive Symbolic Reasoning and Reinforcement Learning for Dynamic Network Traffic Classification” Palmer C Young III and Soo-Yeon Ji (Bowie State University, USA)

1571211747: “Next-Generation Billing Systems for 6G: Architecting Convergent, Real-Time, and Scalable Solutions for the Future of Telecom”, Syed Shiraz Hussain, (Optiva Inc., United Arab Emirates)

Closing the Event - (17:20)