

# **2022 13th International Conference on Network of the Future (NoF 2022)**

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**2022 13th International Conference on the  
Network of the Future (NoF 2022)**

**Technical Program**

**Wireless Networking and Communications**

"*Resilience analysis and quantification method for 5G-Radio Access Networks*"  
Soumeya Kaada (*University of Rennes 1 & Nokia Bell Labs France, France*); Sofiene Jelassi (*IRISA, France*); Marie Line Alberi Morel (*Nokia Bell Labs, France*); Gerardo Rubino (*INRIA, France*)  
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"*A Comprehensive Study of the Impact of 5G Numerologies on V2X Communications*"  
Khabaz Sehla (*Sorbonne, France*); Kaouther Ouali (*Sorbonne University, France*); Thi Mai Trang Nguyen (*Sorbonne Université & LIP6, France*); El Aoun Moustapha (*École Supérieure Polytechnique de Nouakchott, Mauritania*); Guy Pujolle (*Sorbonne University, France*); Pedro B. Velloso (*Universidade Federal do Rio de Janeiro (UFRJ), France & LIP6, Sorbonne Université, France*)  
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"*Bandwidth Prediction in 5G Mobile Networks Using Informer*"  
Tahmina Azmin, Mohamad Ahmadinejad and Nashid Shahriar (*University of Regina, Canada*)  
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**Mobile Edge Networks & IoT**

"*Energy-aware online task dispatching and scheduling for edge systems with energy harvesting*"  
Mu Yuan (*University of Science and Technology of China*); Nikolaos M. Freris (*University of Science and Technology of China, China*)  
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"*Availability and Failure Rate of VNF Instances: Impacting Parameters and Calculation Methods*"  
Siamak Azadiabad and Ferhat Khendek (*Concordia University, Canada*); Maria Toeroe (*Ericsson, Canada*)  
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"*Generating Stateful Policies for IoT Device Security with Cross-Device Sensors*"  
Zorigtbaatar Chuluundorj, Shuwen Liu and Craig A. Shue (*Worcester Polytechnic Institute, USA*)  
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"*EHGA: A Genetic Algorithm Based Approach for Scheduling Tasks on Distributed Edge-Cloud Infrastructures*"  
Ayeh Mahjoubi, Karl-Johan Grinnemo and Javid Taheri (*Karlstad University, Sweden*)  
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"*A Dynamic Algorithm for Optimization of Network Traffic through Smart Network Switch Data Flow Management*"  
Souryendu Das (*Texas A&M University, USA*); Weiting Lian and Stavros Kalafatis (*Texas A&M University, USA*); Pavlos Lazaridis (*University of Huddersfield, United Kingdom (Great Britain)*)  
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*"Leveraging Experience Telemetry: Use Cases"*

*Sudhendu Kumar (North Carolina State University, USA); Martin Beverley and Derek Engi (Cisco, USA); Sam Grimee (Cisco, Luxembourg); Nagendra Kumar Nainar (Cisco Systems, USA); Marisol Palmero (Cisco, Spain); Gonzalo Salgueiro (Cisco Systems, USA); Yannis Viniotis (North Carolina State University, USA)*

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*"Integration of 5G connectivity with the Asset Administration Shell in Industry 4.0"*

*Daniele Rossi and Giacomo Tontini (CIRTI ICT, Italy); Davide Borsatti (University of Bologna, Italy); Franco Callegati (Universita di Bologna, Italy)*

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*"Kapetánios: Automated Kubernetes Adaptation through a Digital Twin"*

*Johannes Zerwas, Patrick Krämer, Razvan-Mihai Ursu and Navidreza Asadi (Technische Universität München, Germany); Philip Rodgers (Rakuten Mobile, United Kingdom (Great Britain)); Leon Wong (Rakuten Mobile, Japan); Wolfgang Kellerer (Technische Universität München, Germany)*

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*"Streaming 8K Video over Millimeter Wave Networks: An Experimental Demonstrator"*

*Hemanth Kumar Ravuri (Ghent University & IMEC, Belgium); Jakob Struye (University of Antwerp – imec, Belgium); Maria Torres Vega (Ghent University, Belgium); Jeroen van der Hooft (Ghent University – imec, Belgium); Jeroen Famaey (University of Antwerp & Imec, Belgium); Tim Wauters and Filip De Turck (Ghent University – imec, Belgium)*

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*"Periodic Control Traffic Support in a Wireless Time-Sensitive Network"*

*Pablo Avila-Campos (Ghent University – Imec, Belgium); Jetmir Haxhibeqiri (IDLab, Ghent University – imec, Belgium); Xianjun Jiao and Muhammad Aslam (Ghent University – imec, IDLab, Belgium); Ingrid Moerman and Jeroen Hoebeke (Ghent University – imec, Belgium); Gilson Miranda, Jr (University of Antwerp & Imec-IDLab, Belgium)*

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**SDN & NFV**

*"Hybrid Wireless Network with SDN and legacy devices in Ad-hoc Environments"*

*Daniela Sousa (Instituto de Telecomunicacoes & Universidade de Aveiro, Portugal); Susana Sargento (Instituto de Telecomunicações, Universidade de Aveiro, Portugal); Miguel Luis (Instituto Superior de Engenharia de Lisboa & Instituto de Telecomunicacoes, Portugal)*

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*"A Multi-objective Optimization Approach for SDVN Controllers Placement Problem"*

*Lylia Alouache (CY Cergy Paris University, France & ETIS Laboratory, France); Sonia Yassa (CY Cergy Paris University, France); Ahfir Abdelouhab (CY PARIS University- ENSEA School & AXIONE, France)*

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*"Green Edge Servers Placement for Intelligent Transport Systems"*

*Sabri Khamari, Abdennour Rachedi, Toufik Ahmed and Mohamed Mosbah (CNRS-LaBRI UMR 5800, University Bordeaux, Bordeaux-INP, France)*

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### **Short Paper Session 2**

*"Implementation of Techniques for Enhancing Security of Southbound Infrastructure in SDN"*

*Uday Tupakula (The University of Newcastle, Australia); Kallol Krishna Karmakar (University of Newcastle, Australia); Vijay Varadharajan (The University of Newcastle, Australia); Ben Collins (University of Newcastle, Australia)*

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*"Photonic-aware Neural Networks for Packet Classification in Beyond 5G Networks"*

*Emilio Paolini (Scuola Superiore Sant'Anna, Italy); Federico Civerchia (SmaRTy Italia SRL, Italy); Lorenzo De Marinis and Luca Valcarenghi (Scuola Superiore Sant'Anna, Italy); Luca Maggiani (SmaRTy Italia SRL, Italy); Nicola Andriolli (National Research Council of Italy, Italy)*

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*"Opportunities and Challenges for Virtual Reality Streaming over Millimeter-Wave: An Experimental Analysis"*

*Jakob Struye (University of Antwerp – imec, Belgium); Hemanth Kumar Ravuri (Ghent University & IMEC, Belgium); Hany Assasa (Pharrowtech, Belgium); Claudio Fiandrino (IMDEA Networks Institute, Spain); Filip Lemic (University of Antwerpen – imec, Belgium); Joerg Widmer (IMDEA Networks Institute, Spain); Jeroen Famaey (University of Antwerp & Imec, Belgium); Maria Torres Vega (Ghent University, Belgium)*

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