

This issue represents the involved project activities from July to September 2018. During this period, new ESRs were recruited, a 5G STEP FWD project presentation was disclosed during IEEE International Workshop on Computer-Aided Modeling Analysis and Design of Communication Links and Networks (CAMAD) conference, TU\e project partner was invited for a public talk in "5G research in the Neatherland", and to ESRs training school was carried out in Barcelona.

# **Table of Contents**

Recruited ESRs	1
First Workshop	3
ESRs school	4

# Recruited ESRs

The Table below illustrates the ESRs that joined the project until september 2018.

ESR	Name	Email	Contract start
IQU-1	Massimiliano Maule	mmaule@iquadrat.com	03/07/2018
CTTC-1	Asmaa Ibrahim Mohamed Badr	Asmaa.badr@cttc.es	03/07/2018
SIAE	Steven Caceido	Steven.Caicedo@siaemic.com	01/08/2018
IQU-2	Mohammadreza Mosahebfard	m.mosahebfard@iquadrat.com	21/08/2018
Chalmers-	Lei Xue	leixu@chalmers.se	01/09/2018
Chalmers- 2	Maryam Lashgari	MARYAML@chalmers.se	01/09/2018
AUTH-2	Umar Farooq	umfarooq@csd.auth.gr	01/09/2018

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement number 722429 Call: H2020-MSCA-ITN-2016 Funding Scheme: MSCA-ITN-European Training Networks

1. Mr. Massimiliano Maule received his B.Sc. degree in Information Engineering from the University of Padova, Padua, Italy, in 2014, and the M.Sc. degree in Telecommunication Engineering from the University of Trento, Trento, Italy, in 2017. He participated at the Erasmus+ Study Programme at the Tampere University of Technology, Tampere, Finland. After the 10 months of exchange program, he contributed as an External Researcher, again at Tampere University of Technology,



to his master thesis project focused on a new channel access technique for Wi-Fi and LTE on the unlicensed spectrum. From 2017 to 2018, he worked for Nokia as a Radio Researcher in Espoo, Finland and as a Network and System Architecture Engineer in Vimercate, Italy. Since July 2017, he is an Early Stage Researcher at Iquadrat Informatica S.L, Barcelona, Spain, in the context of the MSCA ITN 5G STEP FWD program.

2. **Ms. Asmaa Ibrahim** received her Master's and Bachelor's degree from Cairo University, Egypt with 3.9 GPA and honours degree, respectively. She is currently working as an ESR at CTTC, Barcelona, Spain in the framework of the Marie-Curie ITN 5G STEP-FWD project. She worked as a teaching assistant with the International Academy for Engineering and Media Science (IAEMS), Giza, Egypt. Her MSc thesis focused on optimized resource allocation and interference



management techniques in indoor optical communications. She has published a paper during her MSC studies at the *International Conference on Transparent Optical Networks (ICTON 2017)*. Her research interests include 5G wireless communication networks, wireless optical communications and visible light communications.

3. Mr. Steven Caicedo Mejillones received his Diploma in Telematics Engineering in 2014 and his Master Degree in Telecommunications in 2017, both from the Escuela Superior Politécnica del Litoral (ESPOL), Guayaquil, Ecuador. His Master degree project was titled "Development of a tool for the prediction of radio waves propagation in indoor and outdoor microcellular environments based on the technique of 3D ray tracing". From April 2014 to October 2016 he worked as an



outsourcing RF Engineer at Huawei Technologies in Guayaquil. After that, he worked as Radio Access Network Planning and Optimization Engineer at the mobile network operator Claro Ecuador until July 2018 and since August 2018, he has been an Early Stage Researcher at SIAE MICROELETTRONICA S.p.A. in Milan, Italy, within the Marie-Curie ITN 5G STEP FWD program framework.

4. **Mr. Mohammadreza Mosahebfard** was born in Shiraz, Iran. He received his BSc degree in Electronics Engineering in 2013 from Shiraz University of Technology (SUTECH), Shiraz, Iran, and his MSc degree in Communications Engineering in 2016 from Tarbiat Modares University (TMU), Tehran, Iran. His MSc thesis focused on Power Reduction in OFDM-based Indoor Optical Wireless Systems. During his MSc, he collaborated as a teacher assistant for the course



"Optical Communications Systems" with TMU. He also published a paper at West Asian Colloquium on Optical Wireless Communications (WACOWC 2118). Since August 2018, he is recruited as an ESR at Iquadrat Informatica SL, Barcelona, Spain in the framework of the Marie Skłodowska Curie ITN 5G STEP-FWD project.

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5. **Mr. Lei Xue** is from China. He received his BSc degree in communication engineering from Hunan University (HNU) in 2015 and the MSc in Information and Communication Engineering from Shanghai Jiao Tong University (SJTU) in 2018. His research focused on the high-speed passive optical network (PON) and short reach optical transmission using low-cost optical signal processing. In 2018, he joined the Marie-Curie ITN 5G STEP-FWD program as a PhD student at Chalmers



University of Technology. Now he is working on mixed optical and electrical signal processing for next-generation low-cost high capacity PON.

6. **Ms. Maryam Lashgari** received her B.Sc. degree from Shahid-Beheshti University, in 2013 with honors, and the M.Sc. degree from the University of Tehran, Tehran, Iran, in 2016 both in Electrical Engineering, Telecommunication Systems. Her M.Sc. thesis focused on energy-efficient resource allocation in small cell networks by using a gametheoretic approach. From Apr. 2016 to Mar. 2018, she worked as an IP/MPLS planning engineer in Huawei Technologies Co. in Tehran. She was a TPC member and reviewer of ICNC2017, 2018 and 2019, IWWCN2017, and



reviewer of IEEE TCCN, IEEE VTC F'16 and EEEP2016. In 2018, she joined the Marie-Curie ITN 5G STEP-FWD program as a PhD student at Chalmers University of Technology. Her fields of interest include wireless communication, network economics, optical networking, and application of game theory and machine learning.

7. **Mr. Farooq Umar** received his BSc degree in Engineering – Electronics from the University of Engineering and Technology Taxila (Pakistan) in 2013 and his MSc degree in Electrical Engineering from COMSATS Institute of Information Technology (Pakistan) in 2016. His MSc thesis focused on transmitter design and power link budgeting of WDM PONs/Hybrid WDM-TDM PONs. He worked for almost two years at WATEEN TELECOM LIMITED ISLAMABAD as an executive VSAT Engineer- Satellite Department. Now he joined the Marie-Curie ITN 5G STEP-FWD program as a PhD student at AUTH.



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# First Workshop

17-19 September 2018 – Barcelona, Spain.

The International Workshop on Computer-Aided Modeling Analysis and Design of Communication Links and Networks (CAMAD) provided a forum for discussion of recent developments on analytical and simulation tools and techniques for the performance evaluation of communications systems.

This year IEEE CAMAD focused on Communication and Experimentation aspects of 5G Networking and beyond. IEEE CAMAD hosted Workshops and Special Sessions, bringing together a diverse group of scientists, engineers, manufacturers and providers to exchange and share their experiences and new ideas focusing on research and innovation results in the 5G domain. The ESRs, Massimiliano Maule, Mohammadreza Mosahebfard, Asmaa Ibrahim, Lei Xue, Maryam Lashgari, Kebede Tesema Atra, Eugenio Ruggeri, and Dimitrious Konstantinou had the change to make their first public talks in CAMAD 2018.





# 5G STEP FWD School: Heterogeneous and Small Cell Networks: Theory, Standardization, and Challenges

CTTC, 20-21 September 2018 – Barcelona, Spain.

At the first day and during IEEE CAMAD 2018, Prof. Iordanis Kotsopoulos presented "Wireless resource and infrastructure sharing challenges in future wireless architectures". The second session also held during IEEE CAMAD 2018 and was titled "A Primer on 5G Network Slicing: Concepts, Algorithms and Practice" and presented by Dr. Pablo Serrano. The third and fourth sessions of school were hosted by CTTC and titled as "Mobility management and proximity estimation techniques for 5G HetNets" and "Energy Efficiency in Multitenant/ HetNets", and were presented by Dr. Dionisis Xenakis and Dr. Angelos Antonopoulos, respectively.

# SHAL

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