



University of Pavia

**Ph.D. School in Electronics, Computer Science and Electrical Engineering
Ph.D. School in Bioengineering, Bioinformatics and Health Technologies**

SEMINAR

Characterization of Exposure in Emerging 5G/6G Bands: Effect of Age and Impact of Textile

Dr. Giulia Sacco

Institut d'Électronique et des Technologies du numérique (IETR)

University of Rennes 1

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Online: <https://us02web.zoom.us/j/6272078782>

Abstract: The increasing need for high data rate and secured communications is leading to the fast development of 5G wireless mobile networks, whose frequencies are progressively shifting towards millimeter waves (MMW). With this proliferation, more and more seniors and children start using wireless devices, thus expanding the age range of exposed people. In addition, some of the exposure scenarios involve the presence of a textile between an electromagnetic source and skin (e.g. phone call when wearing a hat or browsing with gloves). This presentation will cover various aspects related to the effect of age and impact of textile on electromagnetic power and heat deposition in emerging 5G/6G bands.

Bio: Giulia Sacco received the M.S. degree (summa cum laude) in biomedical engineering and the Ph.D. (cum laude and with the Doctor Europaeus label) in information and communication technology from Sapienza University of Rome, Rome, Italy, in 2017 and 2021, respectively. She is a Marie Skłodowska-Curie BIENVENUE Fellow with Institut d'Électronique et des Technologies du numérique (IETR), Rennes, France.

She was a Visiting Researcher with Sticing imec Eindhoven, The Netherlands from April 2019 to September 2019. Her scientific and research interests include the field of innovative biomedical applications of electromagnetic fields and radars for vital signs monitoring.

Dr. Sacco was the recipient of the "Bourse de jeunes chercheurs" Grant at XXXIV General Assembly and Scientific Symposium (GASS) of the International Union of Radio Science (Union Radio Scientifique Internationale-URSI) 2021, the Best Student Paper Award at the XXXIII General Assembly and Scientific Symposium (GASS) of the International Union of Radio Science (Union Radio Scientifique Internationale-URSI) 2020, and the Best Student Paper Award at Photonics & Electromagnetics Research Symposium (PIERS) 2019.

Organizer
Prof. Marco Pasian

Ph.D. Coordinator
Prof. Ilaria Cristiani
Prof. Silvana Quaglini

Seminar in English

For more information: marco.pasian@unipv.it