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Photonics technologies for 100 Gbps wireless communications

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There is an increasing demand for high capacity wireless communication technologies stemming from the requirement from 5G mobile wireless networking in combination with the proliferation of wireless devices affordable to a wider range of consumers. Moreover, the emergence of internet-of-things (IoT) is demanding to wireless connectivity to sensors and devices. In those scenarios wireless connectivity is much desired and it can be achieved by the use and or support of photonic technologies both for applications related to data transmission as sensing. This talk will review the demands and requirements for high capacity wireless data transmission links with capacities of 100 Gbps and beyond. We will present examples of signal generation, detection for such systems employing photonics technologies. We will also layout current research trends and open research challenges.

Biography

Sebastian Rodriguez received the B.Sc. (2011) and the M.Sc. (2014) in Electronic Engineering in the Pontificia Universidad Javeriana, in Bogota, Colombia. He worked on Rohde & Schwarz as an Application Engineer on the Test and Measurement division. Now he is a Marie Currie fellow in the Department of Photonic Engineering of the Technical University of Denmark.

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