Istituto di Elettronica e di Ingegneria dell'Informazione e delle Telecomunicazioni

## Thursday seminars

Taking a Look at the Future: a cocktail hour event!



## Ing. Jonathan Gambini (HUAWEI)

## Systems And Technologies For Beyond 5G Wireless Networks

While 5G radio communication systems are currently being deployed, industry is looking at cutting-edge technological solutions to further optimize the cost-versus-performance trade-offs for future wireless architectures. From the network perspective, Sub-6 GHz and mmWave (including THz) systems are envisioned to benefit from enriching the radio propagation environment among Macrocell Base Stations with active or passive entities, ranging from IAB Nodes to Intelligent Reflecting Surfaces. Artificial Intelligence is emerging as a promising tool able to capture analytically intractable network behaviors for improving architectural design, planning and operation. From the Mobile Network Operators' perspective, Dynamic Spectrum Sharing can represent an enabling factor for the deployment of 5G mmWave systems, by providing the operators with effective business solutions for maximizing the overall return of investment. In this context, the talk will shed light on some of the most promising Beyond 5G technological solutions, with emphasis on the main challenges that remain open research points.

INTERNET FORME DI FUTURO

<u>Registration form</u> Teams Webinar 3 December 2020 – 17:30

consiglio Nazionale Ielle Ricerche