



18:00–19:30 | Sunday, 4 June 2017

Hilton Hawaiian Village Waikiki Beach Resort, Coral Ballroom

SUNDAY

Plenary Speaker 1



Seizo Onoe

Chief Technology Officer and Executive Vice President, NTT DOCOMO

Deployment Realities of 5G

Abstract:

5G is stimulating our imagination and expectations for a new world that it may bring about by the year 2020. 5G is aimed at meeting a wide range of requirements such as further enhanced mobile broadband, massive connections and extremely long battery life for IoT, and reliable critical communications with low latency. Furthermore, it is highly expected to invent new business models and ecosystems across

the industries. 5G discussion is gathering momentum and so heated that it is becoming a sort of boom, which is sometimes generating unintended misconceptions and myths. Today we as the whole industry are making various strong efforts for 5G, including accelerated standardization activities toward its early realization, forming of alliances, and experimental trials. In the talk, 5G technologies, schedule, lessons learnt from the past generations, and experimental trials and their results are discussed. The observed 5G myths are also described.

Plenary Speaker 2



Gabriel M. Rebeiz

Distinguished Professor, University of California, San Diego

RFIC/Silicon-Based Phased Arrays and Transceivers for 5G

Abstract:

The 5G standard promises a revolution in wireless data transfer with Gbps links over kilometers at millimeter-wave frequencies. This is possible using high-gain antenna arrays resulting in “directive communications” between the base-station and the user, either in a phased-array or in a MIMO configuration. A key challenge is the construction of low-cost phased-arrays and wideband transceivers at 20–60 GHz. Prof. Rebeiz will present the progression of phased-array systems from defense-oriented applications to becoming the cornerstone of commercial 5G systems, and the role of silicon RFICs and advanced packaging to making this happen.