The 48th European Microwave Conference

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Room: N113

WTh-05
New Generations of Microwave Measurements and the Impact of Uncertainty/Sensitivity

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Abstract
New and interesting microwave measurement requirements have recently increased in number, including over-the-air analysis (for 5G and other applications), measurements at Terahertz frequencies, modulated characterization, nonlinear analysis, those measurements involving differential noise considerations and others. In one way or another, all of these measurements need to stress the conventional microwave uncertainty models, whether that is due to complex signals, poorly defined signal paths, extreme bandwidths (either for carriers or in an instantaneous sense), mechanical or other input dependencies, etc. Sometimes a broad study and dissemination of uncertainty mechanisms and behaviors lags the introduction of newer measurements and the sensitivity dependencies may be very complex in some of these evolving fields. This workshop will attempt to bridge that gap by covering the latest thoughts on the processes involved in determining the measurement quality and uncertainty in these innovative categories.

Programme

The New Frontier for Microwave Measurement
Andrea Ferrero[1]
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Bringing Precision to Measurements for Millimeter-wave 5G Wireless: Conducted and Free-field Modulated-signal Measurements
Kate Remley[1]
[1]NIST

A Fresh Look at Characterizing Microwave Noise: from Noise Parameters to Differential Noise Measurements
Luciano Boglione[1]
[1]NRL

Propagation of Uncertainty in Microwave Transistors' Nonlinear Measurements and Modeling: Overview and Outlook
Gustavo Avolio[1]
[1]Anteverta MW|Maury Microwave

Uncertainties and Sensitivities in OTA mm-Wave and THz Measurements

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