

## Workshop on Advanced Measurements for RF Silicon

Organizers: Joe Gering, Qorvo, and Scott Parker, Qorvo

Time: Wednesday, January 29, 2020, 8:00 - 12:00

### Abstract:

Bulk silicon and silicon-on-insulator (SOI) have long been a mainstay in digital and analog applications. These technologies also play a prominent role in RF, microwave, and millimeter-wave applications from radars to cellular phones. This joint workshop between ARFTG and SiRF will address some of the measurement challenges associated with RF silicon. It will start from a user's perspective with talks on the needs in modeling and with transceiver circuits. It will then shift to a measurement perspective with presentations on over-the-air (OTA), ESD, and calibration. Taken in entirety, this workshop will be an excellent resource for metrologists and RF designers alike.

### Program:

7:55-8:00	Welcome
8:00-8:45	<b><i>The ABCs of RF Silicon Modeling for Measurement Engineers</i></b> Scott Parker, Qorvo
8:45-9:30	<b><i>Characterization Challenges of Highly Integrated Transceivers for Radar and Communication Applications</i></b> Vadim Issakov, University of Magdeburg, Germany
9:30-9:45	Break
9:45-10:30	<b><i>OTA Measurements of 5G and Millimeter-Wave Building Blocks</i></b> Jon Martens, Anritsu
10:30-11:15	<b><i>High-Speed TLP and ESD Characterization of Silicon ICs</i></b> Kathy Muhonen, Qorvo
11:15-12:00	<b><i>How to Design Your Own on-Wafer Calibration Standards and Why You Should Do It</i></b> Andrej Rumiantsev, MPI corporation, and Marco Spirito, TU Delft