



# Agilent Technologies

Presents:

## “Fundamentals of RF & Microwave Measurements”

Learn how to get the best results from your RF & Microwave equipment.



When: Friday March 28<sup>th</sup> - 12:30- 2:30PM

Where: Columbia University  
Interschool Lab, 750 CEPSR

Lunch will be provided.

### Topics discussed:

- Basic measurement principles and the effect of measurement uncertainty
- Understanding the measurement principle and the source of errors (uncertainty) in the following RF & uWave Measurement Instruments:
  - Spectrum Analyzer
  - Power Meter
  - Signal Generator
  - Network Analyzer
- Steps to reduce errors (What you can do to get a better measurement):
  - Connector Care
  - Avoiding Impedance Mis-matches
- Test Equipment Selection.
- Accuracy Enhancement (& how good is it).
- Beyond Calibration:
  - Port Extension
  - De-embedding



### Equipment demonstrated during the presentation will include:

- Agilent N5242A- Dual Source high performance network analyzer
- Agilent N9020A - 26.5Ghz Signal Analyzer
- Agilent N5182A - 6Ghz Vector Signal generator
- Agilent U2000A - USB Power Sensor

Presentation will be given by Ernie Jackson from Agilent Technologies. Ernie Jackson has been with Agilent/Hewlett Packard for over 25 years. Currently he is an RF & Microwave applications engineer, covering Metropolitan NY and New England. His primary focus is on high performance network analyzers and signal analyzers. Prior to joining Hewlett Packard as an account manager, Ernie was an R&D engineer for a manufacturer of satellite communication earth stations.

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**Hosted by The Department of Electrical Engineering and the  
Columbia University Chapter of IEEE**



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