

Radio Frequency Scanning Probe Microscopy Workshop Schedule

ARFTG 90

Wednesday, November 29, 2017

St. Julien Hotel, Boulder, Colorado

Session 1 (Mitch Wallis, NIST, Chair)

08:00-08:40 “Microwave Impedance Microscopy as a Probe of Quantum Phenomena in Prospect Topological Phases of Matter” Z. X. Shen, *Stanford University*

08:40-09:20 “Advances in imaging and quantification of electrical properties at the nanoscale using Scanning Microwave Impedance Microscopy (sMIM)” Stuart Friedman, Oskar Amster, and Fred Stanke, *PrimeNano*

09:20-10:00 “Probing Domain Wall Vibration and Electroacoustic Transduction by Microwave Microscopy” Keji Lai, *University of Texas, Austin*

10:00-10:40 Break

Session 2 (Joe Kopanski, NIST, Chair)

10:40-11:20 “Calibrated permittivity and conductivity measurements of nanoscale surface and subsurface structures by scanning microwave microscopy” Ferry Kienberger and Georg Gramse, *Keysight Technologies*

11:20-12:00 “Microwave Near-Field Imaging of Nanoscale Electronic Properties” Sam Berweger, T. Mitch Wallis, and Pavel Kabos, *NIST*

12:00-13:00 Lunch

Session 3 (Sam Berweger, NIST, Chair)

13:00-13:40 “Near-Field Nonlinear Microwave Microscopy of Superconductors” Bakhrom Oripov, Tamin Tai, Seokjin Bae, and Steve Anlage, *University of Maryland*

13:40-14:20 “Near Field Scanning Microwave Microscopy in Biology for Cellular and Subcellular Characterization” Marc Farina, Davide Mencarelli, A. Morini, and A. Di Donato, U. delle Marche

14:20-15:00 “Recent Progress in Microwave Scanning Probe Microscopy at NIST Gaithersburg,” Joe Kopanski and Lin You, *NIST*

15:00-15:30 Break

Session 4 (Pavel Kabos, NIST, Chair)

15:30-16:10 “Integrated Atomic Force Microscope/Scanning Microwave Microscope on a Single CMOS-MEMS Chip” Rafaat Mansour, *University of Waterloo*

16:10-16:50 “Radio Frequency Nano-Probing Under Scanning Electron Microscopy” Kamel Haddadi, O. C. Haenssler, K. Daffe, S. Eliet, C. Boyaval, S. Arscott, D. Theron, and G. Dambrine, *University Lille*

16:50-17:30 “Scanning microwave microscopy of cristae remodeling of the interior of mitochondria” Peter Burke, *University of California, Irvine*