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Recent Presentations

- "Free-Dynamical Reversible Josephson Junction Logic Gates," Applied Superconductivity Conference, Denver, CO, Sept. 7, 2016.
- "The Random-Defect Laser: Manipulating lossy two-level systems to create a circuit with coherent gain," Quantum Metamaterials and Technology Workshop, Spetses, Greece, June 23, 2016.
- "1/f permittivity noise probed uniformly in a film with two level systems: The power law of field saturation and the relationship to loss," APS March Meeting, Mar. 18, 2016.
- "Flux Solitons Studied for Energy-Conserving Reversible Computing," APS March Meeting San Antonio, TX, March 6, 2015.
- "Low-Dissipation Flux Solitons as Practical Reversible Objects," Applied Superconductivity Conference, Charlotte, NC, August 13, 2014.
- "Millikelvin defects in resonators: Defect interactions and dipole moment extraction in thin films," NASA-Goddard, Greenbelt, MD, July 15, 2014.
- "Quantum computing circuit two-level system defects and their phenomena," Rutgers University, New Brunswick, NJ, November 14, 2013.
- "Resonator Studies for Quantum Computing," Quantum Computing and Quantum Algorithm Program Review, San Diego, CA, August 13, 2013.
- "Two Level Systems in Superconducting Devices," Tulane University, February 13, 2013.
- "Two Level Systems: Nonequilibrium Dynamics and ab initio screening," IARPA/ARO Coherent Superconducting Qubit Program Review, San Francisco, CA, Jan. 23, 2013.
- "Non-Equilibrium Dynamics in the Two Level Systems of Amorphous Dielectrics," NIST, Gaithersburg, MD, October 23, 2012.
- "Resonator Studies for Quantum Computing: Nonequilibrium Response of TLSs in Dielectrics," NSA/ARO Quantum Computing and Quantum Algorithm Program Review, Denver, CO, August 14, 2012.
- "SQUIDs, Superconducting Electronics, Landauer's Limit and Reversibility," SEALeR Workshop, Annapolis, Maryland, March 15, 2012.
- "Universal and NonUniversal Properties of Silicon Nitride Films," IARPA/ARO Coherent Superconducting Qubit Program Review, San Francisco, CA, Jan. 19, 2012.
- "Resonant Amorphous Defect States in Coherent Superconducting Devices," Tulane University, Chemistry Department, October 3, 2011.

- “Resonator Studies for Qubit Coherence and Readout: The Josephson Junction Defect Spectrometer,” NSA/ARO Quantum Computing and Quantum Algorithm Program Review, Denver, CO, August 9, 2011.
- “Low-Temperature Defects in Quantum-Regime Superconducting Devices ,” JQI Seminar, University of Maryland Physics Department, College Park, MD, May 09, 2011.
- “Low Loss Amorphous Silicon Nitride,” Northrop Grumman, Linthicum, MD, February 8, 2011.