



Name: **Emily Barrentine**

Affiliation: NASA Goddard Space Flight Center

Position: Detector Development Engineer, 2012-present
Formerly, Detector Test Lead, HIRMES SOFIA mission.
Currently, Detector System Lead, EXCLAIM mission.
Currently, PI for μ -Spec integrated on-chip spectrometer technology development.

Education: Ph.D. in Physics, University of Wisconsin-Madison, 2011
B.A., Physics, Bryn Mawr College, 2003

Research Interests/Areas of Expertise: Design, fabrication, and characterization of superconducting detectors for submillimeter and millimeter-wave astrophysics applications (transition-edge sensors and kinetic inductance detectors), integrated superconducting on-chip spectrometers.

Publications: About ~20 papers on applied superconductivity, in the following journals: IEEE Transactions on Applied Superconductivity, Journal of Low Temperature Physics, Review of Scientific Instruments, Journal of Astronomical Telescopes, Instruments, and Systems

Approximate Number of Years in Applied Superconductivity: 16 years

Previous ASC Participation & Service: Participant 2008, 2010, 2014, 2018 & 2020
Session Chair/Moderator ASC 2014

Other: Expert reviewer for the IEEE Transactions on Applied Superconductivity, Journal of Low Temperatures Physics, & Applied Physics Letters.

Mentor to undergraduate & graduate students through NASA's internship, NSTRF, and other programs.

Honors and Awards:
2020, Science & Technology Advancement Award, NASA-GSFC Engineering & Technology Directorate
2010, New Achiever Award, NASA-GSFC Instrument Systems & Technology Division
2006 – 2009, NASA Graduate Student Researcher Program Fellow