Contribution ID: **194** Type: **Review/Tutorial**

# Superconducting Nanowire Single-Photon Detectors (INVITED)

*Tuesday, 23 July 2019 08:30 (30 minutes)*

Superconducting nanowires have demonstrated remarkable performance in terms of efficiency, jitter, dark counts, and reset time. As a result, they have found application in fields ranging from deep-space communications to quantum communications. And recent discoveries have shown remarkable advances in the important performance parameters. However, a number of key developments remain either not fully understood, or remain to be applied to real-world uses. Among them, the development of large-area arrays for use in spectroscopy and imaging, and the development of sensitivity across a wider range of optical bandwidth.

In this talk, I will review recent developments in the field, focussing in particular on the interesting new role that the device microwave environment plays in device performance. I will also present some opportunities for integration of superconducting electronics with the nanowires. Finally, I will comment on opportunities for future work.

## Less than 5 years of experience since completion of Ph.D

N

## Student (Ph.D., M.Sc. or B.Sc.)

N

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**Session Classification:** Orals LM 001

**Track Classification:** Low Temperature Detector Development and Physics