Contribution ID: **178** Type: **Talk**

Arran Phipps (Stanford University): Dark Matter Radio

Thursday, 22 February 2018 17:16 (14 minutes)

The Dark Matter Radio (DM Radio) is a sensitive search for sub-eV axion and hidden photon dark matter over a wide mass range. While Weakly Interacting Massive Particles (WIMPs) have been the primary focus of direct detection for several decades, there has been growing interest in searching for ultra-light-field candidates such as the hidden photon (spin 1 boson) and axion (spin 0 boson). DM Radio uses a superconducting, tunable lumped-element LC resonator with SQUID-based readout. I will discuss the motivation, detection strategy, status, and prospects for the DM Radio experiment and show the dark matter phase space that DM Radio will search over the next several years.

Presenter: PHIPPS, arran (Stanford University)

Session Classification: Session 9