



## High Energy Physics Lunch Seminar

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## "Cosmology and Superconducting Detectors"

Host: Amy Bender

February 12, 2019 – 12:00 p.m.-1:00p.m. Building 362/F-108

### Abstract:

The Cosmic Microwave Background is a unique tool to investigate the early universe and the largest structures observable in the sky. The main CMB observables such as anisotropies, polarization state and Sunyaev Zel'Dovich effect can give us a detailed view of the cosmos providing stringent constraints to the parameters of our models. To extract the information encoded in the radiation we need extremely sensitive detectors and low noise readout. Transition edge sensors and superconducting quantum interference devices are the state of the art technology for this purpose. The implementation on present and future balloon borne experiments will be introduced and discussed.

### HEP Lunch seminar info:

Please use the doodle poll to sign-up for lunch at

<https://doodle.com/poll/6n8a9uvk83idyxnq>

Chicken Sandwich \$8, Sub Sandwich \$9, Salad \$7, Slice of Pizza- \$5 (all include coffee).

Coffee 25¢. Pop or Water 75¢.

The HEP Lunch Seminar Schedule can be viewed at:

<https://indico.fnal.gov/event/19662/>