Contribution ID: **46** Type: **not specified**

DM-Ice: A dark matter detector at the South Pole

Tuesday, 31 May 2011 14:10 (20 minutes)

DM-Ice is a new direct detection dark matter experiment planned for deployment deep in the South Pole ice underneath the IceCube Neutrino Telescope. This detector will consist of approximately 250-kg of NaI(Tl) scintillating crystals and will have sensitivity to testing the expected annual modulation in the dark matter signal. Following the results of DAMA/LIBRA and preliminary findings of CoGeNT with respect to this modulation, an experiment in the southern hemisphere will be able to test the hypothesis while eliminating or reversing seasonal environmental and cosmic ray effects.
In December 2010, two prototype units of 17-kg combined crystal mass were deployed at a depth of ~2200 m.w.e.; these units are now taking data. We will report on the current status of the prototype and discuss the full-scale experiment.

Presenter: WALTER PETTUS

Session Classification: Session 3

Track Classification: Cosmic Frontier