



SACRAMENTO
STATE

Department of Physics and Astronomy

Physics & Astronomy Colloquium

Fall 2010

Searching for Cosmic Neutrinos with a Cubic Kilometer of Ice

IceCube is a neutrino telescope embedded into one billion tons of deep Antarctic glacial ice at the South Pole. IceCube aims to detect high-energy neutrinos from astrophysical sources outside our solar system and elucidate the origin of cosmic rays, the most energetic particles in the universe. Conversely, IceCube may lead to fundamental insights at the microscopic scale including the nature of dark matter and particle physics beyond the standard model. I will highlight some aspects of the IceCube science program, report on the progress in detector construction which will be completed in 2011, and present recent results from IceCube.

Kirill Filimonov

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Department of Physics***

Thursday, October 21, 2010
4:00-5:20 PM - MND 1015

Open and free to all students, faculty, and public