



Eastbay Astronomical Society Presents

Saturday September 12, 2015, 7:30 – 9:00 PM

Chabot Space and Science Center: **Galileo Room**

Join the Eastbay Astronomical Society for our free monthly presentation on the latest in space and astronomy! In addition to our honored guest speaker, we will feature news from Chabot SSC and the EAS and be giving away door prizes to a lucky few.

Observing the High-Energy Universe: Astronomy in with Telescopes in the Antarctic

Nathan Whitehorn

PhD Candidate, UC Berkeley Department of Physics

Dinner with the Speaker: You are invited to join our speaker for dinner beforehand, starting at 5:30 pm at **Hunan Yuan Restaurant at 4100 Redwood Road in Oakland, CA.**



The IceCube Lab under the stars
Credit: Felipe Pedreros, IceCube/NSF

Cosmic rays can reach extraordinary energies, exceeding 10^{20} eV -- more than 100 million times the highest energies produced at any man-made particle accelerator. A century after their discovery, the origin of these particles, which must be among the most violent environments in the universe, is still unknown. The cubic kilometer IceCube neutrino observatory built into the South Polar ice cap attempts to answer this question by looking for neutrino emission from these objects and, for the first time, has now seen the first signals from these unknown cosmic accelerators.

About our Speaker



Nathan Whitehorn received his PhD from the University of Wisconsin in 2012 on neutrino emission from Gamma-Ray Bursts using the IceCube polar neutrino observatory, seeing nothing. Moved to see something, he then worked on the discovery of what appears to be a diffuse extragalactic neutrino background, providing the first direct view of cosmic ray accelerators. He currently works at UC Berkeley on observations of the cosmic microwave background using the South Pole Telescope and POLARBEAR.

COST: Free for members of Chabot Space and Science Center and EAS
Donations are welcome and very much appreciated.

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