Contribution ID: **42** Type: **not specified**

IceCube's neutrinos - galactic or extra-galactic?

Monday, 8 May 2017 15:30 (15 minutes)

IceCube has observed a diffuse flux, for which we now need to determine the origin - which could possibly be a combination of galactic and extra-galactic sources. A number of authors have suggested that our galaxy can account for the whole IceCube flux. However, we know that our galaxy is not unique and that there must be other similar galaxies in the rest of the Universe producing neutrinos at a similar rate. If we assume that our galaxy produces almost all of the neutrinos observed and therefore that all other galaxies in the rest of the Universe are combining to produce almost nothing at IceCube, does this paint a consistent picture for the total IceCube flux and number and distribution of sources in the Universe?

Primary author: Ms ATKINS, Natasha (University of Adelaide)

Presenter: Ms ATKINS, Natasha (University of Adelaide)

Session Classification: Neutrino Astronomy

Track Classification: Neutrino Astronomy - Convenor: Gisela Anton, FAU / ECAP