



Contribution ID: 337

Type: **Poster**

Matter Neutrino Resonance above a Black Hole Accretion Disk

We present a novel type of neutrino flavor transformation behavior in the context of accretion disks above compact object mergers. These neutrino environments differ from supernovas, the sun and the early universe and are thus home to neutrino flavor transitions unseen elsewhere. We compute neutrino oscillation including self-interaction effects for merger disks with realistic energy and flux hierarchies for different neutrino flavors. We use a single energy model to explain the transitions.

Primary author: MALKUS, Annelise (North Carolina State University)

Co-authors: FRIEDLAND, Alexander (Los Alamos National Lab); MCLAUGHLIN, Gail (North Carolina State University)

Presenter: MALKUS, Annelise (North Carolina State University)

Track Classification: Supernova Neutrinos