Speaker: Martin Schmaltz (Boston University)

Title: Populating dark sectors from neutrino mixing after BBN

Abstract: Dark sectors with radiation are important targets for CMB and LSS measurements and may be motivated by the H0 and S8 tensions. Dark radiation with an energy density equal to a sizeable fraction of a neutrino is severely constrained by dNeff bounds from BBN. In this talk, I show that these bounds are evaded and dNeff ~ 0.2-0.5 arises naturally when a dark sector is populated from neutrino mixing with dark fermions and scattering after BBN.