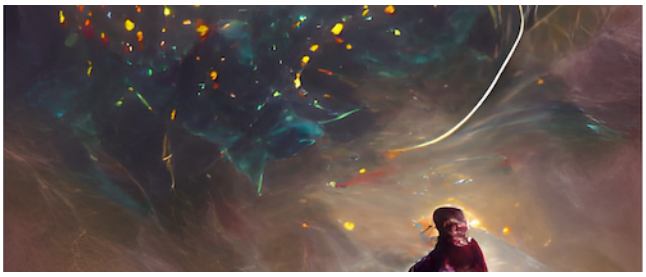

Contribution ID: **16** Type: **not specified**

Foreground halo contributions to FRB dispersion measures: Preliminary constraints from the FLIMFLAM Survey

Tuesday, 8 March 2022 11:40 (20 minutes)

Fast radio burst (FRB) dispersion measures (DMs) from radio observations record the presence of ionized baryons that are otherwise invisible to effectively all other techniques. Therefore, with FRBs, we may resolve the matter distribution in the cosmic web offering unique constraints on our cosmological paradigm. The number of FRBs localized to their host galaxies has steadily increased to the point that there are now tens of such FRB sightlines. With these in mind, we have designed the FLIMFLAM survey, primarily aimed at obtaining redshifts of the foreground galaxies proximal to FRB sightlines in order to independently estimate the FRB DM. For a few sightlines, we have already obtained spectra of hundreds of field galaxies using the AAT/AAOmega and the Keck/LRIS and DEIMOS spectrographs. I will present initial model constraints on the contribution of intervening halos to the FRB DM for the sightlines that are analyzed.

Presenter: SIMHA, Sunil (University of California Santa Cruz)

Session Classification: Day 2 Morning