

Cosmic Cartography 2022: Exploring the Cosmic Web and Large-Scale Structure



Contribution ID: 50

Type: **not specified**

Constrained Simulations of COSMOS galaxy protoclusters at high redshifts

Thursday, 10 March 2022 14:00 (30 minutes)

Constrained cosmological simulations, are designed to match the observed distribution of galaxies. Here, we present constrained simulations based on spectroscopic surveys at a redshift of $z \sim 2.3$, corresponding to an epoch nearly 11 Gyrs ago. This allows us to “fast-forward” the simulation to our present day and study the evolution of observed cosmic structures self-consistently. Our simulations confirm and model the fate of already known galaxy protoclusters, additionally finding several new ones. This method will be increasingly important for future deep and dense surveys

Presenter: ATA, Metin (Kavli IPMU)

Session Classification: Day 4 Afternoon