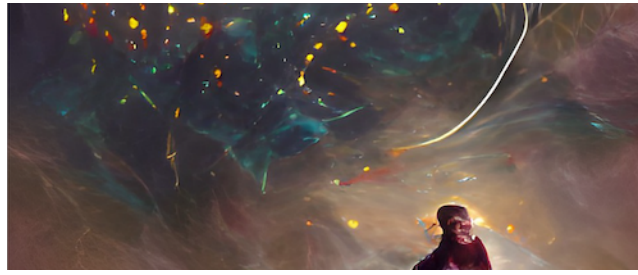


## Cosmic Cartography 2022: Exploring the Cosmic Web and Large-Scale Structure



Contribution ID: 66

Type: **not specified**

### Cloning the local Large-Scale Structure with constrained simulations

*Friday, 11 March 2022 15:20 (20 minutes)*

To study the cosmic web, surveys are designed to acquire a large quantity of spectral and multi-wavelength imaging data. To be fully understood and exploited, these data must be analyzed in combination with advanced cosmological simulations. Ideally the latter must be first calibrated at  $z=0$  with extremely faithful numerical counterparts of the local, best known, cosmic web. I will introduce such simulations for the local Universe, a.k.a. CLONES (Constrained LOcal & Nesting Environment Simulations). I will present a few results, in particular regarding the local galaxy clusters, that promise to tremendously increase our capacity to evade systematics that will matter in analyses in order to reach accurate precision cosmology with future surveys of the cosmic web.

**Presenter:** SORCE, Jenny (Institut d'Astrophysique Spatiale / Leibniz-Institut fuer Astrophysik, Potsdam)

**Session Classification:** Day 5 Afternoon