

## Field level model for HI: mocks and applications

*Friday, 2 June 2023 09:40 (15 minutes)*

I will summarise results on modelling HI from different hydro simulations using analytical field level model. I will then give an update on the method and the code 'Hi-Fi mocks' to generate arbitrary large 3D HI mocks from smaller hydro-simulations. Finally I will show how robustly one can recover the input cosmology from these mocks using power spectrum and use these results to forecast the cosmological constraints from upcoming 21cm surveys.

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