Observational constraints and key-parameters of the EoR

Adelie Gorce*1,2

¹Institut dástrophysique spatiale – Université Paris-Sud - Paris 11, Centre National de la Recherche Scientifique : UMR8617 – France ²Imperial College London – United Kingdom

Abstract

In this talk, partly following arXiv:1710.04152 (accepted for publication in A&A in 2018), I will confront the latest observational constraints available on the Epoch of Reionisation, mostly star formation history, IGM ionised fraction and CMB Thomson optical depth. Because their value is still largely controversial, I will also look at the impact of two essential parameters on the actual reionisation storyline: the escape fraction of ionising photons into the IGM and the clumping factor of ionised hydrogen. However, these results strongly depend on the choice of magnitude limit and I will quickly mention its implications.

^{*}Speaker