Contributed Talk

Splinter AGN

The role of AGN in cosmic reionization

Ewald Puchwein[1]

[1] *Institute of Astronomy & Kavli Institute for Cosmology, University of Cambridge*

Claims of a previously undetected population of faint AGN at high redshift have sparked new interest in scenarios in which AGN contribute significantly to the reionization of hydrogen. We model such scenarios and test them against post-reionization observational constraints on the temperature of the intergalactic medium (IGM) and the opacity of the hydrogen and HeII Lyman-alpha forests. While such an AGN population could provide an explanation for observed spatial fluctuations in the hydrogen Lyman-alpha forest opacity at $z > 5.5$, it is disfavoured by IGM temperature measurements and observations of the HeII Lyman-alpha forest.