

Probing the Primordial Universe with 21cm line

Wednesday, March 25, 2020 10:00 AM (40 minutes)

I discuss how one can probe the primordial Universe by using the neutral hydrogen 21 cm line, particularly focusing on primordial fluctuations. After briefly reviewing the physics of 21cm line, I discuss how the 21cm global signal, such as observed by EDGES, can probe small-scale primordial power spectrum. I also discuss the prospect of probing primordial non-Gaussianities with 21cm line. I argue that the 21 cm line would be a powerful probe of primordial fluctuations.

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Session Classification: Invited talks