

Latest/last constraints on the Epoch of Reionization from Planck

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The cosmic microwave background provides a crucial window into the early universe's evolution, offering insights into the epoch of reionization (EoR). In this talk, I will present new constraints on the reionization history derived from the final Planck data release (Public Data Release 4, PR4). Leveraging the enhanced sensitivity and reduced systematic uncertainties of the PR4 data, we explore a comprehensive suite of reionization models to reconstruct the EoR with greater precision. By meticulously accounting for the implicit priors associated with each model, we aim to minimize biases in our inference of the reionization history. Our findings provide tighter constraints on the timing and duration of reionization, offering deeper insights into the sources and processes that governed this transformative epoch.

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Classification de Session: CMB analysis and results