

First Upper Limits from HERA on the 21 cm Power Spectrum

Thursday, 12 August 2021 13:15 (15 minutes)

In this talk, I will present the first power spectrum upper limits from the Hydrogen Epoch of Reionization Array (HERA), a purpose-built 21 cm experiment under construction in South Africa. I will highlight several of the supporting efforts—especially calibration and systematics mitigation—that build confidence in our result and in our instrument more generally. Finally, I will discuss how this milestone for the HERA team fits into our broader quest to detect and characterize the 21 cm power spectrum from the Cosmic Dawn and how such a measurement will complement CMB-S4.

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Session Classification: From the Dark Ages to Reionization with CMB-S4