

Clarifying the Hubble Constant Tension

Thursday, 25 March 2021 10:00 (1 hour)

Abstract: Our best estimate of the Universe's current expansion rate (the Hubble constant) from the local Universe (via the Cepheid distance ladder) is in four-sigma tension with the value extrapolated from cosmic microwave background data assuming the standard cosmology. Whether this discrepancy represents physics beyond the Standard Model or deficiencies in our understanding of the data is the subject of intense debate. In this talk, I will review the community's attempts to explain and interpret the Hubble constant tension, clarifying the current picture using Bayesian probability theory, and consider the potential for independent gravitational wave observations to arbitrate the dispute.

Presenter: Dr FEENEY, Stephen (University College London)

Session Classification: Highlight talk