



PHYSICS COLLOQUIA

HUBBLE TROUBLES

Prof. Licia Verde

Instituto de Ciencias del Cosmos (ICC), University of Barcelona, Spain

Abstract: Despite its spectacular success, the ACDM model is ultimately phenomenological: it establishes a robust framework in which some fundamental issues remain unresolved. With observations becoming increasingly precise, it is reasonable to expect that "something's gotta give" and that the ACDM model will show some cracks. The Hubble tension— the discrepancy between the value of the Hubble parameter, when inferred as a global parameter of the standard cosmological model, and when measured directly in the late-time Universe from the redshift-to-distance relation— has been looming for a decade and has been studied extensively. Could it be such a crack? I will give an overview of the status of the Hubble tension and tentatively speculate on why it has persisted thus far.

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Grassano Room