

# Interacting dark energy and the $H_0$ tension

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## Abstract

Dark Matter and Dark Energy are two main ingredients of the universe occupying nearly 96% of its total energy budget. Usually these two fluids are assumed to be conserved separately (in other words, they do not interact with each other) and the resulting picture is well described by the  $\Lambda$ -Cold Dark Matter ( $\Lambda$ CDM). However, recent observational evidences are suggesting that a revision of the  $\Lambda$ CDM cosmology is needed, and, as a result, various cosmological models have been proposed. In this talk, I shall discuss a special cosmological theory which allows a non-gravitational interaction between dark matter and dark energy, known as ‘interacting dark matter-dark energy’ or ‘interacting dark energy’. The models of interacting dark energy have many appealing consequences. In particular, I shall discuss how interacting dark energy models play a crucial role in alleviating the Hubble constant ( $H_0$ ) tension.

## Venue

PAMU Seminar Hall  
A.N. Kolmogorov  
Building, ISI, Kolkata

## Date & Time

6th March, 2024  
03:00 PM



*Everyone is invited to attend*