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Hubble Tension: Can Dark Energy in the Early Universe Resolve the Issue?¹ MANJU PRAKASH, Hofstra University — Understanding the origin of the discrepancy between the value of Hubble constant derived from the Cosmic Microwave Background (CMB) radiations data using the Lambda Cold Dark Matter Model, and that calculated from the experimental observations of supernovae I and pulsating stars is an outstanding problem in cosmology. One of the approaches to resolve this controversy is to use new form of dark energy in the early universe and integrate it into the Lambda Cold Dark Matter model. These studies will present theoretical calculations on the values of the Hubble constant obtained using the different mathematical forms of dark energy. The outcome of these studies will be discussed in the context of Hubble Tension problem.

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