



Contribution ID: 1

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## Can Quantum Mechanics explain the Dark Universe?

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Two of the most impressive open questions in science are, without a doubt, the discovery of the nature of Dark Matter and Dark Energy, the so-called Dark Universe. Scientists have worked to solve these questions for many years, decades. Quantum Mechanics (QM) was established to understand the microworld, atoms, molecules, etc. Since 1998 we have carried out a systematic study of the Scalar Field Dark Matter model, also called Ultralight Dark Matter model where Dark Matter satisfies the Schrödinger-Poisson equations. In this talk we are going to speak about how QM can give an alternative explanation to the problem of the Dark Universe, assuming that Dark Matter halos behave like atoms and dark energy could be a consequence of the most elemental precepts of QM.

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