

Dipartimento di Fisica Università di Cagliari INFN, Sezione di Cagliari



# HIGH ENERGY PHYSICS COLLOQUIA

### 18 marzo 2016 · ore 15:00 · aula C

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# QUANTUM COSMOLOGY WITH DISTORTED GRAVITY

#### Abstract

Even if a full and complete theory of Quantum Gravity and Quantum Cosmology is absent, the Wheeler-DeWitt equation appears as a natural instrument for the quantization of the gravitational field. In this context we setup a Sturm-Liouville problem with the cosmological constant considered as the associated eigenvalue. We will discuss the effects of some modifications of General Relativity, like Gravity's Rainbow, GUP and Horava-Lifshitz theory on the Wheeler-DeWitt Equation. An application to inflation will be discussed.

