



Instituto de Estructura de la Materia

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Seminario del Departamento de Química y Física Teóricas

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Before the Beginning: an introduction to Loop Quantum Cosmology

One of the most prominent goals of modern theoretical physics is a unification of Einstein's theory of General Relativity with Quantum Physics: a theory of Quantum Gravity. In past few years an application of one of the leading candidates for such theory to cosmology – so called Loop Quantum Cosmology, has lead to qualitative change in the picture of the evolution of the Universe. According to its predictions the Big Bang, so far marking the beginning of time, is replaced by a Big Bounce and the present expanding Universe is preceded by an older (contracting) one, which deterministically bounced and then started to reexpand. In consequence the time reaches much farther into the past, beyond the former point of origin. This talk is a simple semipopular introduction to the main ideas and goals of Loop Quantum Cosmology, as well as the presentation of its recent developments.

Lunes, 15 de Junio de 2009, 12:00 horas.

Sala de Conferencias. Centro de Física “Miguel A. Catalán”.

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