EINLADUNG

im Rahmen des Seminars für Mathematische Physik

zum Vortrag

von

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über

„Quantized cosmological space-times from Yang-Mills matrix models“

Abstract:

We present simple solutions of IKKT-type matrix models describing quantized homogeneous and isotropic cosmologies with finite density of microstates and a resolved Big Bang (BB). The BB arises from a signature change of the effective metric on a fuzzy brane embedded in Lorentzian target space, in the presence of a quantized 4-volume form. The Hubble parameter is singular at the BB, and becomes small at late times. There is no singularity from the target space point of view. One solution describes a linear coasting cosmology at late times, which is remarkably close to observation. That solution consists of two sheets with opposite intrinsic chiralities, which are connected in a Euclidean pre-big bang era.

Zeit: Dienstag, 07.11.2017, 14:00

ACHTUNG: Ort: TU Wien, Freihaus, SEM 136, 10. Stock, Wiedner Hauptstr. 8-10, 1040 Wien

gez.: S. Fredenhagen, D. Grumiller