



POLITÉCNICA

Seminario de investigación Antonio Giraldo y Sonia Sastre



CONFERENCIA

Disturbing the Big Bang

por

Phillipo Lappicy (Universidad Complutense de Madrid)

RESUMEN

I will give an introductory talk on the dynamics of the Big Bang singularity and perturbations thereof. This topic has attracted a great deal of attention of both mathematicians and physicists since the heuristic approach of Belinski–Khalatnikov–Lifshitz (known as BKL conjecture) and the Mixmaster attractor construction of Misner. We will see how a specific perturbation of the Big Bang singularity will unravel well-known and brand-new dynamical features, including a Cantor set and an iterated function system. Moreover, we will see how such perturbations yield good (or bad) approximating schemes of the usual Einstein's general theory of relativity. These results were fruit of collaborations with K.E. Church (U Montreal), V.H. Daniel (Columbia U), J. Hell (FU Berlin), O. Hénot (McGill U), J.P. Lessard (McGill U), H. Sprink (FU Berlin) and C. Ugla (Karlstad U).

Lugar:

SALA H-1003 (BLOQUE 1)
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Fecha:

EL DÍA 7 de julio de 2025
A LAS 12:00 HORAS