Gravitational Physics Faculty of Physics Boltzmanngasse 5 1090 Vienna, Austria



INVITATION

as part of the Gravitational Physics Literature Seminar

to the talk by

Florian BEYER

(University of Otago)

on

"Big bang dynamics of cosmological fluid models"

Abstract:

This talk investigates the dynamics of cosmological Einstein-scalar field-fluid solutions near the Big Bang singularity, moving beyond assumptions of spatial homogeneity and isotropy. Over the past decade, significant progress has been made in understanding these dynamics through advances in the theory of nonlinear partial differential equations, though many questions remain unresolved.

I will provide an overview of these developments focusing on recent results from my collaboration with Todd Oliynyk.

Time: Wednesday, 4 June 2025, 2:15 p.m.

Location: Seminarraum A, Währinger Straße 17, 1090 Vienna, 2nd floor