Kolloquium über Reine Mathematik

Einladung zu einem Vortrag

Dienstag, 28. Januar 2020

17 Uhr s.t., Geom H4

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Lie Sphere Geometry as a Tool in Relativistic Cosmology

Abstract:

The purpose of modern cosmology is to model the global structure of our universe by means of Einstein's equations. These comprise a complicated system of non-linear partial differential equations for the semi-Riemannian geometry of spacetime coupled to other fields characterising its matter content. In this talk I shall outline a recent idea how to employ Lie Sphere Geometry to construct new sets of initial data of the matter-free Einstein equations, in which the gravitating role of matter is represented by lattice-like distributions of black holes. I will start with a gentle introduction into Lie Sphere Geometry and then explain how it may be used in General Relativity.

Vor dem Vortrag (ab 16.30 Uhr) stehen im Raum 327 Kaffee und Tee bereit.