



Contribution ID: 35

Type: **Talk in the parallel session**

Strong cosmic censorship theorem in Bakry-Emery spacetimes

Monday, 5 July 2021 18:00 (30 minutes)

A class of naked strong curvature singularities is ruled out in Bakry-Emery spacetimes by using techniques of differential topology in Lorentzian manifolds.

These spacetimes admit a Bakry-Emery-Ricci tensor which is a generalization of the Ricci tensor. This result supports the validity of Penrose's strong cosmic censorship conjecture in scalar-tensor gravitational theories, which include dilaton gravity and Brans-Dicke theory.

Primary author: NARITA, Makoto

Presenter: NARITA, Makoto

Session Classification: Topological Methods, Global Existence Problems, and Spacetime Singularities

Track Classification: Early Universe: Topological methods, global existence problems, and spacetime singularities