Seminar

Prof. Martin Reiris

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A classification of static and stationary solutions to Einstein field equations obtained by the application of novel techniques in comparison geometry

Monday, July 31, 2017

at 13:00 h

ESI, Boltzmann Lecture Hall

Abstract: I will talk about Bakry-Émery comparison techniques and the way of application to classification problems of the static and stationary solutions of the Einstein equations. I will mainly explain their use in a recent classification theorem of "static vacuum black holes" which are vacuum static solutions whose only requirement is to have compact but non necessarily connected horizon and to be metrically complete, in particular no further assumption is made on the topology or asymptotic. More tangentially, I will mention also applications to the Einstein/Klein-Gordon system and to the problem of the existence of stationary and axisymmetric vacuum solutions extending the static Myers/Korotkin-Nicolai solutions.

P. Chruściel

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