GR 4: Black Holes II

Time: Tuesday 14:00–14:45   Location: HBR 14: HS 2

Invited Talk   GR 4.1   Tue 14:00   HBR 14: HS 2

What if black hole spacetimes are singularity-free? — •Piero Nicolini — Universität Triest, Triest, Italien — INFN, Triest, Italien — Johann Wolfgang Goethe-Universiät Frankfurt am Main, Frankfurt am Main, Deutschland — FIAS, Frankfurt am Main, Deutschland

Although the Penrose-Hawking singularity theorems leave little room for the fate of collapsing matter, since the 1960s there has been great interest in the possibility of deriving black hole solutions with a regular center. In this talk, after a short historical review, I will briefly discuss the main features of regular black holes. Finally, I will comment on the emerging new phenomenology and what can be learned from such spacetimes for the future.