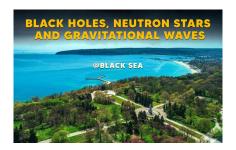
Black Holes, Neutron Stars, and Gravitational Waves @ Black Sea



Contribution ID: 35 Type: Oral presentation

What if black hole spacetimes are singularity-free?

Tuesday 17 June 2025 15:40 (15 minutes)

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 brief historical review, I will discuss the main features of regular black holes and their implications for fundamental physics. Finally, I will comment on the emerging new phenomenology in astrophysics and particle physics and what can be learned from such spacetimes for the future.

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