



UNIVERSITÄT LEIPZIG

Fakultät für Physik und
Geowissenschaften

Prof. Dr. M. Grundmann, Dekan

Fakultäts-Kolloquium – Antrittsvorlesung –

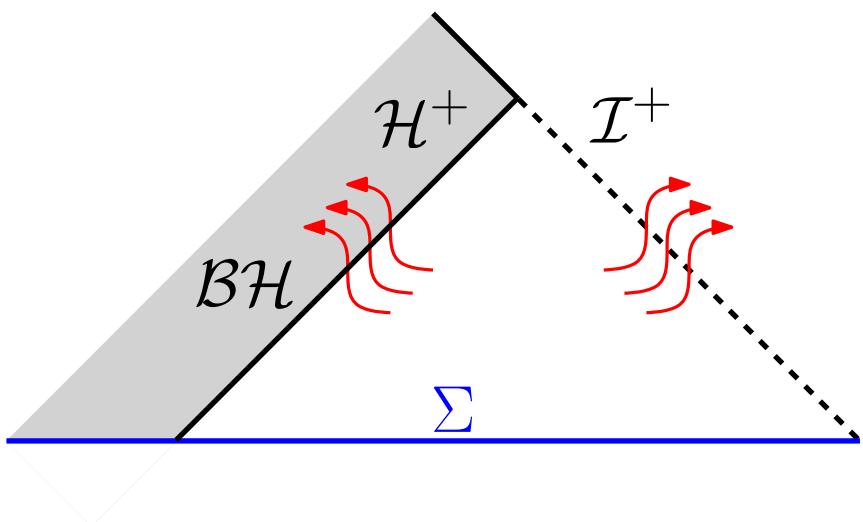
Dienstag, 27. Juni 2023, 16:30 Uhr

Prof. Dr. Dejan Gajic

Institut für Theoretische Physik, Universität Leipzig

Rotating black holes, gravitational waves and determinism

Black holes are perhaps the most enigmatic objects predicted by Einstein's theory of general relativity. I will discuss what happens when we "poke" a black hole and how we can learn about black hole dynamics by proving mathematical theorems. I will also discuss how the late-time behaviour of gravitational waves emanating from dynamical black holes is intimately connected to the question of determinism in general relativity. Finally, I will describe new phenomena that occur when black holes rotate at their speed limit.



**Kleiner Hörsaal,
Linnéstraße 5, 04103 Leipzig**

Alle Teilnehmer sind im Anschluss an den Vortrag (ab ca. 17:30 Uhr) zu einem Empfang mit Snacks und Getränken in der Aula eingeladen.