Gravitational Physics
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I N V I T A T I O N

as part of the Gravitational Physics Literature Seminar

to the talk by

Vojtěch WITZANY

(Charles University Prague)

on

"Spinning test particles in black hole fields: Dynamics and inspirals"

Abstract:
The motion of spinning test particles in a curved background is a classical topic of General relativity. Currently, it finds applications in the modelling of inspirals of spinning compact objects into massive black holes. In recent years, we have made significant progress in the modelling of the spin contribution to the orbit and outgoing gravitational-wave flux of the compact object in the black-hole field. Technically, this involved a number of tools, ranging from the Hamiltonian formalism to Killing-Yano tensors and the hidden symmetry of black holes. In this talk, I will summarize these developments.

Time: **Wednesday, 22 October 2025, 2:15 p.m.**

Location: **VERA Seminar Room (Viktor-Franz-Hess Lecture Hall), Währinger Straße 17, 1090 Vienna, Hoftrakt, 1st floor**

sgd.: D. Fajman