## Karpacz Winter Kindergarten of Theoretical Physics



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## Poster "Black hole shadows"

Thursday 23 May 2024 14:00 (1 hour)

Abstract: "Black holes cannot be observed directly, in the sense that they represent a causally separated region of spacetime. However, there are many different sources of electromagnetic radiation in its surroundings and visual background, whose photons allow us to trace the black hole's effects on spacetime. Null geodesics are strongly curved in the presence of a black hole's (or other ultra compact objects) gravitational field, and thus outline a specific visual profile known as the shadow. We will give an overview of the theoretical models and methods used to study the shadows of black holes, as well as some open questions, including the use of these models to discriminate between candidate theories based on observational data."

Presenter: BUSAK, Laura (University of Zagreb)

Session Classification: Kindergarten