## Karpacz Winter Kindergarten of Theoretical Physics



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## Poster "Gravitational waves"

Thursday 23 May 2024 10:30 (1h 15m)

Abstract: "As we know today, massive astrophysical bodies act as sources of gravitational waves, traveling deformations of the gravitational field. Although Albert Einstein predicted their existence in 1916, a better theoretical understanding of gravitational waves didn't emerge until 50 years later, spurred by Trautman's analysis of the radiation energy. Direct observation of these waves has been achieved only a century later through the international collaboration LIGO, using precise interferometric devices. In this presentation, we provide an overview of theoretical treatments of gravitational radiation, including the problems of recoil and self-force of radiating point bodies, and showcase various approaches to calculating radiated energy."

Presenter: MILAS, Maja (University of Zagreb)

Session Classification: Kindergarten