Sixteenth Marcel Grossmann Meeting



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Virtual sector models: Exploring the curved spacetime near a neutron star

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In general relativity, the paths of light and freely falling particles are described as geodesics in curved spacetime. Sector models allow the construction of these geodesics without having to introduce the usual mathematical apparatus. Virtual sector models, provided by the web-based application ViSeMo, enable students to explore physical phenomena in a given spacetime. Examples include light deflection, redshift, and free fall onto and even into a neutron star.

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