Sixteenth Marcel Grossmann Meeting



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Type: Talk in the parallel session

Gravitational Waves Generated by a Slowly Rotating Wormhole

Tuesday, 6 July 2021 11:15 (15 minutes)

In this talk, the gravitational wave generation by a slowly rotating wormhole with radially pulsating throat is considered. Two types of rotating wormholes are used as the model of the wave generation: the slightly rotating Ellis wormhole and the thin-shell wormhole. The later was made from two Kerr black hole solutions. To treat the problem, the assumption of the slightly rotating is validated by the ranges of the mass. We calculated the strain amplitudes and the powers emitted in gravitational wave for each cases and life times of the wormhole through the radiation.

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