A Hazard-free Method for Gravitational Waves

Andrew B. Carroll, M. A. Zeb, Daniel J. Keith, Philippe Gouin

Abstract

A new method to compute gravitational waves from a given point of a massive scalar field, known as the graviton method, is introduced. The method involves finding a point of a trajectory that is also a point of a source. In the case of the gravitational wave propagation, such a point lies in the direction of the gravitational wave path-interaction. The method can be used to compute the gravitational waves of the massive scalar field Einstein. The method is believed to be the first of its kind to take into account the contributions of the gravitational-wave response of the source and gravitational waves.