SEMPARIS – Séminaires en région parisienne

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Seminar of the theory group of APC

Mardi 12 Fevrier 2019, 14 :00
APC, 646A - Mondrian
Domaines : gr-qc

Titre : *Analytic Properties of High Spin & Large Mass-ratio Coalescences*

Orateur : **Geoffrey Compère**

Résumé : *I will review the derivation of gravitational waveforms for binaries with large mass ratios based on conformal symmetry methods. I will first motivate the astrophysics of intermediate mass ratio inspirals and black holes with very high spin. I will then turn to review the near-horizon properties of the high spin Kerr black hole and I will outline the conformal symmetry methods to derive gravitational waveforms. I will derive the key signatures of such waveforms. I will end by extending the point particle limit to finite size corrections using the Mathisson-Papapetrou-Dixon formalism.*