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Seminar of the theory group of APC

Mardi 27 Juin 2017, 14 :00 APC, 483A - Malevitch Domaines : hep-th

Titre : Factorization of IR Dynamics : Soft Black Hole Hair as Soft Wigs

Orateur : Massimo Porrati (New-York University)

Résumé : Conserved charges associated with large gauge symmetries and Bondi-Metzer-Sachs symmetries of asymptotically Minkowski spacetime have been recently shown to give new "soft hair" for black holes – beyond mass, charge and angular momentum. In this talk, I will outline a study of the constraint on dynamics due to these new symmetries. I will prove that they only constrain long-time, infrared dynamics, in a way that is completely factorizable. Factorization implies in particular that soft hair does not constrain the "hard" physical processes that account for black hole microstates.