Institut Henri Poincaré

11 rue Pierre et Marie Curie, 75231 Paris cedex 05

String Theory in Greater Paris

Rencontres Théoriciennes

"Supergravité, théorie des cordes et théorie M"

Jeudi 27 Fevrier 2020, 11:40

Jay Armas

University of Amsterdam

Geometries and Instabilities of Black Holes in Higher-Dimensions

I will discuss worldvolume effective theories describing black holes and branes in higher-dimensional gravity and supergravity. I will review how these can be used to perturbatively construct non-trivial black holes solutions with various topologies, geometries and with arbitrary asymptotics. Examples include asymptotically flat black helicoidal branes, rings and tori as well as asymptotically plane wave black Scherk-surfaces. I will also briefly discuss extremal horizons and applications to antibrane metastable states in supergravity. Finally, I will show how this effective theory can be used to study instabilities of asymptotically flat black rings as well as (Anti)-de Sitter black rings.

Institut Henri Poincaré, salle 314, 3ème étage

Retrouvez les activités de la communauté parisienne de théorie des cordes sur
`http ://string.lpthe.jussieu.fr`
La liste de tous les séminaires en région parisienne est disponible sur
`http ://string.lpthe.jussieu.fr/semparis`