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 7 Fevrier 2019, 10:00

Gary Horowitz

UCSB

The Mysterious Cosmic Censorship - Weak Gravity Connection

I will describe a surprising connection between two longstanding conjectures : Cosmic censorship and weak gravity. I will first present a class of counterexamples to (weak) cosmic censorship in anti-de Sitter spacetime. These are solutions in which the curvature grows without bound in a region of spacetime visible to infinity. I will then explain the weak gravity conjecture and show that when it is satisfied, these counterexamples go away. Various generalizations will be discussed, always with the same conclusion : the weak gravity conjecture removes potential counterexamples to cosmic censorship.

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`