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 30 Novembre 2017, 10:00

Harvey Reall

DAMTP, Cambridge, UK

On the well-posedness of Lovelock and Horndeski theories of gravity

Lovelock theories are the most general theories of a metric tensor with second order equations of motion. Horndeski theories are the most general four-dimensional theories of a metric tensor and a scalar field with second order equations of motion. Many hundreds of papers have been written about these theories. But it is unknown whether they satisfy a basic consistency requirement, namely well-posedness of the initial value problem. I will discuss this problem and explain why the method used to establish well-posedness of the Einstein equation fails for Lovelock theories and the most general Horndeski theories.

Institut Henri Poincaré, salle 314, 3ème étage

Retrouvez les activités de la communauté parisienne de théorie des cordes sur
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