Institut Henri Poincaré

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String Theory in Greater Paris

Rencontres Théoriciennes

"Supergravité, théorie des cordes et théorie M"

Jeudi 18 Fevrier 2016, 10:00

Vatche Sahakian

Harvey Mudd College

Entanglement, geometry, and black holes in Matrix theory

In the context of the Banks-Fischler-Shenker-Susskind Matrix model of M-theory, black holes and geometry are encoded in matrix degrees of freedom. I elaborate on this map by demonstrating that the relevant dynamics is realized through a system of qubits with a dense network of interactions. Using methods from quantum information theory, I compute the information scrambling time in Matrix black holes ; and I present evidence that geometry is encoded in qubit entanglement entropy.

Institut Henri Poincaré, salle 314, 3ème étage

Retrouvez les activités de la communauté parisienne de théorie des cordes sur
`http ://string.lpthe.jussieu.fr`
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