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String Theory in Greater Paris

Rencontres Théoriciennes

“Supergravité, théorie des cordes et théorie M”

Jeudi 22 Novembre 2018, 11:40

George Papadopoulos

King’s College, London

Superconformal symmetry and classification of black hole horizons

The horizon conjecture states that all near horizon geometries of extreme black holes that preserve some supersymmetry exhibit an sl(2, R) symmetry. I shall demonstrate the proof of the conjecture in some theories and use it to identify all the Killing superalgebras of near horizon geometries. An application of these results is that there are no near horizon geometries that preserve strictly more than 16 supesymmetries in 10 and 11 dimensions.

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