

Prof. Gerard 't Hooft (Utrecht University) The Quantum Structure of the Black Hole Horizon

TIME:

1 Nov 2007, 17:00 - 18:30

LOCATION:

HU-Berlin Institut für Informatik, Hörsaal 3.001 Rudower Chaussee 25 12489 Berlin

It is now generally expected that black holes display a pure quantum spectrum of states. In this respect, they are not fundamentally different from unstable resonances in a scattering process. The properties of these resonances can be derived from Standard Model physics and perturbative gravity. A systematic approach is described that leads to an algebra of operators defined on the horizon, applicable to non-extreme black holes.