Graduate Seminar

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Thursday, November 19, 2015 1:00p.m., HH-3017

Near Horizon Studies on Weyl and Vaidya Spacetimes

Abstract:

I will talk about some near horizon studies on Weyl and Vaidya spacetimes. In the Weyl case, we construct a Taylor series expansion of the metric near the horizon using information on the horizon. The expansion is used to locate a timelike surface close to the horizon. This is a physically meaningful construction. Using the Vaidya spacetime, we show that one can define an umbrella term that contains all the known near equilibrium quasilocal horizons. The talk will be based on my Masters thesis supervised by Dr. Ivan Booth.