Abstract Submitted
for the APR10 Meeting of
The American Physical Society

Asymptotically AdS spacetimes in 2+1 dimensions ARIF MOHD, LUCA BOMBELLI, University of Mississippi — We revisit the asymptotically AdS spacetimes in 2+1 dimensions. Using conformal techniques we formulate the boundary conditions in a covariant fashion and construct the global charges associated to the asymptotic symmetries. We calculate the Trace Anomaly which is same as the Central Charge of the algebra of asymptotic symmetries first obtained by Brown and Henneaux. The motivation for this work is to understand why the central extension or the trace anomaly arises and how one can extend these techniques to formulate the boundary conditions specifying the presence of a black hole.

Arif Mohd
University of Mississippi

Date submitted: 22 Oct 2009 Electronic form version 1.4