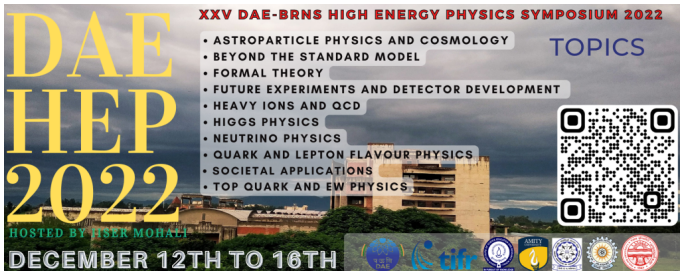

Contribution ID: **96** Type: **Poster**

Ideal gas limit and equipartition theorem for AdS black holes

Monday 12 December 2022 14:00 (1 hour)

In the framework of black hole chemistry, we present an equipartition theorem for four dimensional AdS black holes with spherically symmetric and static horizons in Einstein gravity. It is found that at high temperatures, the total enthalpy of the spacetime is equally shared among the putative microstructures of the black hole horizon with each degree of freedom contributing an energy $k_B T$. This strengthens the analogy between the thermodynamics of gases and that of black holes. Finally, we demonstrate the consistency of our result from a holographic point of view.

Session

Formal Theory

Author: GHOSH, Aritra

Co-author: Dr BHAMIDIPATI, Chandrasekhar (School of Basic Sciences, IIT Bhubaneswar, India - 752050)

Presenter: GHOSH, Aritra

Session Classification: Poster - 1