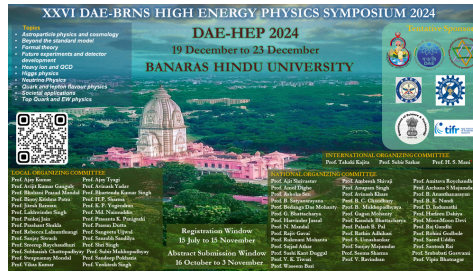


# XXVI DAE-BRNS High Energy Physics Symposium 2024



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## Quasilocal First Law and Boost Charge in Einstein-Gauss-Bonnet Gravity

We study the covariant phase space for Einstein- Gauss- Bonnet gravity, admitting weak isolated horizons as inner boundary. We find out that the Hamiltonian charge corresponding to residual Lorentz boosts on the horizon matches exactly with the Wald entropy. We also give a derivation for quasilocal first law of black hole mechanics in Einstein-Gauss- Bonnet gravity.

### Field of contribution

Theory

**Authors:** Dr CHATTERJEE, Ayan (Central University of Himachal Pradesh); Mr DEVDUTT, Sahil (Central University of Himachal Pradesh)

**Presenter:** Mr DEVDUTT, Sahil (Central University of Himachal Pradesh)

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