

## XXV DAE-BRNS High Energy Physics Symposium 2022



Contribution ID: 540

Type: Poster

# Generalized BMS algebra in higher even dimensions

Monday 12 December 2022 14:00 (1 hour)

We revisit the status of asymptotic symmetries in higher even dimensions and propose a definition of superrotation charge beyond linearized gravity. We prove that there is a well-defined spacetime action of the superrotation charge on the space of asymptotically flat geometries. Additionally, we demonstrate that the Ward identity associated with superrotation charges follows from the subleading soft graviton theorem, which is a universal constraint (in  $d > 4$ ) along with the leading soft graviton theorem.

## Session

Formal Theory

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**Session Classification:** Poster - 1