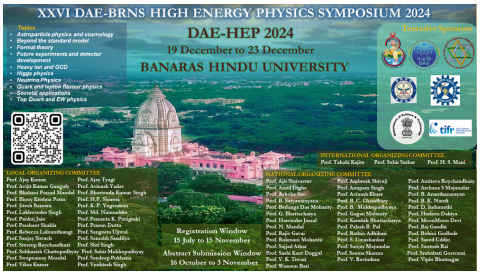

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Tensionless Strings: Closed and Open

We study null open strings and establish, for the first time, that the worldsheet residual gauge symmetry algebra is the Boundary Carrollian Conformal Algebra (BCCA). We present the construction of open null strings and demonstrate that, under Dirichlet boundary conditions, Boundary Carrollian Conformal Algebra emerges as the algebra of constraints. Additionally, we show that the BCCA can be obtained by contracting a single copy of the Virasoro algebra, confirming that null open strings arise as the tensionless limit of tensile open strings. This discovery initiates a broader study of Carrollian Conformal Field Theory (CCFT) with boundaries, opening a range of new research possibilities, given the growing importance of Carrollian symmetries.

Field of contribution

Theory

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Track Classification: Formal theory