Institut Henri Poincaré

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String Theory in Greater Paris

Rencontres Théoriciennes

“Supergravité, théorie des cordes et théorie M”

Jeudi 6 Novembre 2025, 11:30

Dominik Neuenfeld

University of Würzburg

The Flat Limit of AdS Coupled to a Bath

In this talk I’ll explain how to take a well-defined flat-space limit of brane models of AdS coupled to a non-gravitating bath. In the dual BCFT this amounts to a triple-scaling limit where both the number of boundary degrees of freedom and the boundary coupling are taken to infinity while the BCFT boundary piecewise approaches a lightcone. The resulting construction offers a new approach to study the relation between the flat limit of AdS and Carrollian/Celestial CFT, as well as the potential to carry over ideas from AdS/CFT to flat space. I will discuss some implications for entanglement entropy in flat space, in particular the fact that two different notions of entanglement entropy arise on scri, depending on whether one traces out modes which have left through scri.

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