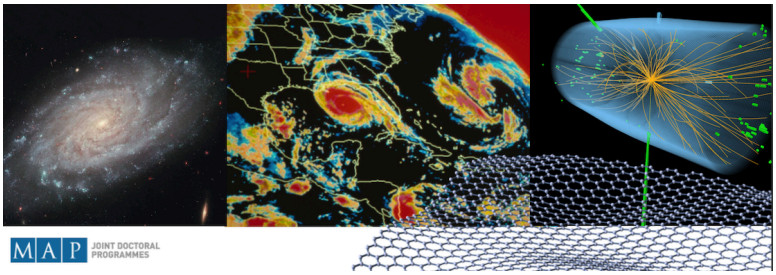

Contribution ID: **121** Type: **Contributed Talk (20 minutes)**

Holographic five-point functions with arbitrary weight

Friday 11 October 2024 12:10 (20 minutes)

Conformal field theories (CFTs) are a subset of quantum field theories which are invariant under conformal transformations. CFTs are of great theoretical interest, partly due to the AdS/CFT conjecture, which asserts that a gravitational theory living in d-dimensional Anti-de Sitter (AdS) space is dual to a CFT on the $(d-1)$-dimensional boundary of this space. This is a powerful correspondence, since it allows us to use powerful machinery available for CFTs to extract results about theories with gravity. In this talk, I will discuss ongoing work on the computation of scalar correlators in a particular CFT known as $\mathcal{N}=4$ supersymmetric Yang-Mills theory, in the strong coupling regime. Although four-point functions have been extensively studied in this regime, only a few specific five-point functions are known.The goal of this project is to extend the study of these five-point functions, which encode new information about the AdS dual theory.

Which topic best fits your talk?

High Energy Physics and Cosmology

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