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## Towards Classical Bulk Reconstruction of Asymptotically Flat Spacetimes

Wednesday, 18 December 2024 20:40 (20 minutes)

Abstract: The classical bulk reconstruction of Locally Asymptotically Anti-de Sitter (LAAdS) spacetimes and the associated computation of boundary correlators and a boundary stress-energy tensor constitute some of the first non-trivial checks of the AdS/CFT correspondence. I will begin this talk with a brief nod to this remarkable story, following which I will discuss setups that can be, and are being, considered for spacetimes that are asymptotically flat at null infinity. In particular, I will describe why a conformal Carrollian structure at null infinity could serve as a putative setting for a boundary dual. I will then outline a setup for a corresponding bulk reconstruction problem and comment on similarities and differences with the AdS scenario, with emphasis on the role played by gravitational radiation.

Comments: Based on ongoing work with Jelle Hartong, Emil Have and Gerben Oling.

**Presenter:** NENMELI, Vijay (University of Edinburgh) **Session Classification:** Poster Session & Dinner