

Flat Space/Carrollian Limit of AdS/CFT in General Dimensions

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Carrollian holography provides a framework for flat space holography, proposing that gravity in asymptotically flat spacetime in D dimensions is dual to a Carrollian CFT in $D-1$ dimensions living at null infinity. In this talk, I will present this framework in general dimensions and explain how massless amplitudes in flat space can be re-expressed as Carrollian CFT correlators at the boundary, referred to as Carrollian amplitudes. I will describe how these correlators in $D-1$ dimensions relate to celestial CFT correlators in $D-2$ dimensions. I will then show that Carrollian correlators naturally arise from the Carrollian limit of holographic CFT correlators computed via AdS Witten diagrams, establishing a correspondence between the flat limit in the bulk and the Carrollian limit at the boundary. This paves the way towards deriving flat space holography from the flat space/Carrollian limit of the AdS/CFT correspondence.