Holography for Flat Spacetimes - A Carrollian Adventure

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Venue: A304

Zoom link shall be shared separately

I will review the Carrollian approach to holography in asymptotically flat spacetimes (AFS). The Carroll group arises in the vanishing speed of light limit of the Poincare group and its conformal cousin has been put forward as a possible holographic dual to AFS. In a nutshell, Carrollian holography states D-dimensional AFS is dual to a (D-1)-dim Carroll CFT. I will highlight past successes in lower dimensions before focussing on recent work in 4d AFS/3d Carroll CFT, where I will contrast this to the other popular approach, Celestial holography. I will also discuss how the Carrollian picture emerges as a limit of AdS/CFT through Witten diagrams.

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