ID de Contribution: **44** Type: **Non spécifié**

Non-relativistic corners in string theory and AdS/CFT

lundi 3 juillet 2023 16:15 (30 minutes)

I will start by showing how certain near BPS limits of N=4 SYM lead to a type of non-relativistic string, indicating its relevance as a corner of the AdS/CFT correspondence. Subsequently, I discuss how these fit in the larger landscape of non-relativistic strings. The original formulation of non-relativistic strings on flat target spacetime was introduced already twenty years ago, but recent progress in our understanding of non-Lorentzian geometries such as Newton-Cartan geometry has enabled to formulate this sector on arbitrary curved nonrelativistic spacetimes. I will show how strings on torsional string Newton-Cartan geometry arise from a limit of relativistic strings. Finally, I will introduce a further limit that leads to a novel class of worldsheet sigma models that not only have a non-relativistic target spacetime but also exhibit non-relativistic worldsheet symmetries, and explain that such Gallilean sigma models are connected to near BPS limits of the AdS/CFT correspondence.

Orateur: OBERS, Niels

Classification de Session: Eugène Cremmer memorial session