

Dynamical Cobordism in AdS/CFT

Tuesday, 25 June 2024 17:45 (15 minutes)

The dynamical realization of the cobordism conjecture in type IIB in $\text{AdS}_5 \times \text{S}^5$ will be presented, using the existing gravity duals of 4d $\mathcal{N} = 4$ SYM with Gaiotto-Witten superconformal boundary conditions (near-horizon limits of D3-branes ending on NS5- and D5-branes). These configurations are, from the 5d perspective, dynamical cobordism solutions which start from an asymptotic AdS_5 vacuum and evolve until they hit an end of the world (ETW) brane with AdS_4 worldvolume. The latter displays localization of gravity, and provides a completion of the Karch-Randall (KR) AdS branes, in which the backreaction of running scalars replace the KR cusp in the warp factor with a smooth bump.

Presenter: HUERTAS, Jesús

Session Classification: Parallel session