DANMARKS FRIE FORSKNINGSFOND

Unifying correlators in AdS5xS5 supergravity

Monday 20 August 2018 15:15 (45 minutes)

We study correlation functions half-BPS operators in N=4 super Yang-Mills at strong coupling,
dual to tree-level supergravity on AdS5xS5. We use techniques from the CFT toolkit: an inversion formula
which expresses OPE data at this order as integrals over a finite sum of protected conformal blocks. The results
for different spherical harmonics confirm recent conjectures, and reveal a striking simplicity: we show that
the correlators fit together into a single ten-dimensional object, which enjoys a "hidden" conformal invariance.

Summary

Presenter: CARON HUOT, Simon