10<sup>th</sup> Anniversary Special Edition



Contribution ID: 21

Type: not specified

## **Quantum Gravity from Conformal Field Theory**

Thursday, 11 January 2018 14:30 (20 minutes)

I will describe the problem of constructing perturbative loop corrections to AdS\_5 supergravity amplitudes, which are dual to 4pt-correlators in N=4 super Yang-Mills theory. By using the consistency of the CFT's operator product expansion and known tree-level supergravity results, we are able to bootstrap loop corrections by imposing a consistent spectrum of exchanged double-trace operators.

## What would be the preferred length of your talk?

20 minutes + questions

**Primary authors:** Dr APRILE, Francesco (Universita Milano-Bicocca); Mr PAUL, Hynek (University of Southampton); Dr DRUMMOND, James M. (University of Southampton); Dr HESLOP, Paul (Durham)

**Presenter:** Mr PAUL, Hynek (University of Southampton)

Session Classification: Session V