Institut Henri Poincaré

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String Theory in Greater Paris

Rencontres Théoriciennes

“Supergravité, théorie des cordes et théorie M”

Jeudi 27 Mars 2025, 10:00

Daniele Dorigoni

Durham

Modular Structures in N=4 SYM

I will review some recent results in N=4 SYM where we compute exactly, as functions of the holomorphic coupling constant τ and the number of colours N, certain integrated correlators of four superconformal primary operators in the stress-tensor multiplet, as well as integrated correlators of two such operators in the presence of a half-BPS line defect. The modular properties of these physical observables induced by electro-magnetic duality will prove of fundamental importance in our discussion.

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