

Integrable defects in N=4 SYM

Monday 15 July 2024 16:20 (40 minutes)

In this talk I will discuss the classification of integrable conformal defects in N=4 SYM theory for which the scalar fields pick up a non-trivial vacuum expectation value. Defects of this form correspond to Dirichlet boundary conditions that have a pole at the defect. These set-ups typically appear on the field theory side of probe brane set-ups in the AdS/CFT correspondence. I will discuss the properties of the different possible fuzzy spheres that can appear and present the corresponding Matrix Product States. I will also comment on the quantum field theoretic framework such as the mass matrix and propagators.

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