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Integrability in Giant Graviton Dynamics

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Abstract content (Max 300 words) **Formatting & Special chars**

In this talk the large N limit of the anomalous dimensions of operators in $N = 4$ SYM theory, described by restricted Schur polynomials, is considered. We consider operators with a classical dimension of order N that belong to the $SU(2)$ sector. They are constructed using $m \sim O(N)Y$ and $n \sim O(N)Z$ fields where $m \ll n$. Non-planar diagrams contribute already at the leading order in N and the planar and large N limits are distinct. Integrability in the non-planar limit is explored, with an emphasis on terms of size m/n , needed to establish integrability in $N = 4$ SYM in large N but non-planar limits.

Apply to be considered for a student award (Yes / No)?

YES

Level for award (Hons, MSc, PhD, N/A)?

PHD

Main supervisor (name and email) and his / her institution

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