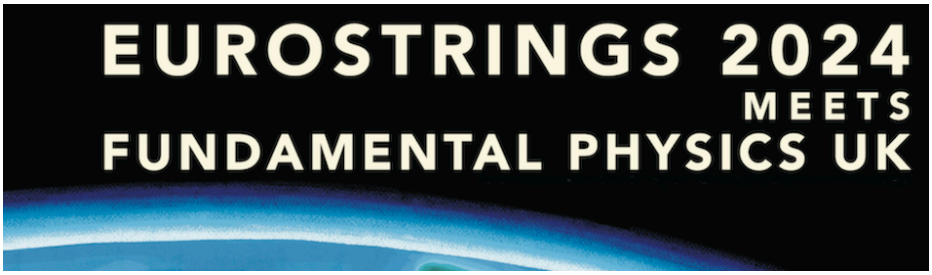

Contribution ID: **95** Type: **Talk in parallel session**

Strong coupling expansion of determinant observables in supersymmetric gauge theories

Friday 6 September 2024 15:10 (20 minutes)

A special class of observables in N=4 and N=2 SYM can be expressed as determinants of semi-infinite matrices. At strong coupling, the expansion of these observables are asymptotic. The perturbative coefficients was already determined in the literature. We have established a method to systematically calculate the non-perturbative part as well. It is based on the fact that the elements of the defining matrices are given by truncated Bessel kernels. Their structure provide several constraints to the observables in forms of differential and integral equations. Using them and the analyticity properties of the kernel the entire asymptotic series can be determined.

Link to publication (if applicable)

https://journals.aps.org/prl/accepted/49076Y70Dfe11594043f6798550225f14e218977d

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Session Classification: Parallel sessions

Track Classification: Resurgence and non-perturbative methods 2