

Christian Marboe

Title:

“Solving the Quantum Spectral Curve for N=4 SYM at Weak Coupling”

Abstract:

The Quantum Spectral Curve (or P-mu system) of N=4 SYM [hep-th/1305.1939] phrases the spectral problem of the theory in terms of a relatively simple Riemann-Hilbert problem. My poster will outline how it is possible to determine all quantities of the P-mu system perturbatively at weak coupling and thus compute the anomalous dimension of a given operator to a higher precision than in other any other known method. The outlined procedure applies to all local operators in the $sl(2)$ sector, and is based on yet unpublished research by the author and Dmytro Volin (Trinity College Dublin).