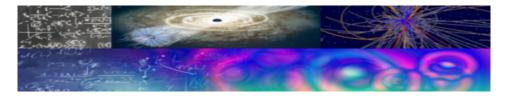
XV Workshop on Geometric Correspondences of Gauge Theories



Contribution ID: 55 Type: **not specified**

Exact WKB of solutions by Borel summation and open TBA

Friday, June 20, 2025 11:30 AM (1 hour)

I will present two exact WKB methods for solutions of differential equations within the framework of the differential equation/4d N=2 supersymmetric theory correspondence. The first method is the well-known Borel summation. I will demonstrate how supersymmetric theories provide a prescription for identifying the singularities on the Borel plane, as well as for formulating the associated discontinuities in the Borel summation. I will also introduce the Gaiotto–Moore–Neitzke (GMN) open TBA equations—integral equations whose solutions are closely related to those of the differential equations. And I will describe how to match the results from the two exact WKB methods.

Presenter: HAO, Qianyu