Integrable Systems: Geometrical and Analytical Approaches

Contribution ID: 30

Resurgent large genus asymptotics of intersection numbers

Monday, June 3, 2024 11:50 AM (50 minutes)

I will present a new approach to the computation of the large genus asymptotics of intersection numbers, in particular of Witten—Kontsevich, Theta and r-spin intersection numbers. Our technique is based on a resurgent analysis of the generating series of such intersection numbers, and relies on the presence of a quantum curve and the determinant formulae. With this approach, we are able to extend the recent results of Aggarwal with the computation of subleading corrections, solving a conjecture of Guo–Yang and initiating the development of a universal technique to explore large order asymptotics of enumerative problems that appear in the context of topological recursion. Based on joint work with B. Eynard, A. Giacchetto, P. Gregori and D. Lewański.

Primary author: GARCIA-FAILDE, Elba (Universitaire de Jussieu)

Presenter: GARCIA-FAILDE, Elba (Universitaire de Jussieu)