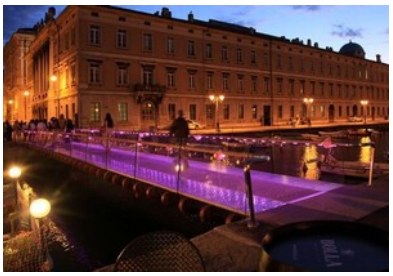

Contribution ID: **22** Type: **not specified**

Partition function of Argyres-Douglas theories on the blowup.

Friday, February 23, 2024 11:30 AM (15 minutes)

Supersymmetric QFTs can be studied at the non-perturbative level because quantum corrections are under control. In particular for N=2 theories the IR dynamics is encoded in the Seiberg-Witten curve which is naturally related to an integrable system. In presence of a self-dual Omega background the integrable system becomes time-dependent and is given by Painlevé equations. In this talk we we will study the Nekrasov partition function of SU(2) gauge theory in 4d on the blowup of spacetime and we will show that this gives a new expansion of the Painlevé tau function which encodes interesting physical informations and has special properties in the case of Argyres-Douglas theories.

Presenter: MATJARA, Ideal (SISSA)

Session Classification: Gong Show 2