

ICTS String Seminar

- Title : Holomorphic anomaly in Vafa-Witten theory
- Speaker : Pavel Putrov, International Centre for Theoretical Physics, Trieste
- Date : Wednesday, August 19, 2020
- Time : 03:00 pm
- Abstract : Vafa-Witten theory is a topologically twisted version of 4d $N=4$ super Yang-Mills theory. In my talk I will tell how to derive a holomorphic anomaly equation for its partition function on a Kaehler 4-manifold with $b_2^+=1$ and $b_1=0$ from the path integral of the effective theory on the Coulomb branch. I will also briefly mention an alternative but somewhat similar computation of the same holomorphic anomaly in the effective 2d theory obtained by compactification of the corresponding 6d (2,0) theory on the 4-manifold. The talk is based on a joint work with A. Dabholkar and E. Witten.
- ICTS virtual seminar : Please register at <https://docs.google.com/forms/d/e/1FAIpQLSf0jLgoqiOgDnxbEBGi uIWiOmh9WX8caH-pr13qDBZOO91lmg/viewform>
(Links to join the seminars will be sent to your registered email address)

Recordings of past talks can be found here:

<https://www.youtube.com/channel/UCw9LdPQ5t7Q7muD0qzn70TA>