

## **ICTS String Seminar**

- Title : Modularity of supersymmetric partition functions
- Speaker : Abhijit Gadde (Tata Institute of Fundamental Research, Mumbai)
- Date : Wednesday, 23 September 2020
- Time : 03:00 pm (IST)
- Abstract : In this talk, I will present a novel modular property of 4d  $N=1$  supersymmetric partition functions of supersymmetric theories with R-symmetry. It is a generalization of the modular invariance of the supersymmetric partition function of two-dimensional supersymmetric theories on a torus i.e. of the elliptic genus. It comes from requiring consistency of partition functions under gluing and, among other things, can be used to rederive the supersymmetric Cardy formula for four-dimensional gauge theories that has played a key role in computing the entropy of supersymmetric black holes.

[ICTS virtual seminar](#) : Please register at  
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(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>