



ICTS String Seminar

Title : Gauge Orbit Space and Yang-Mills in 3d and 4d

Speaker : V. Parameswaran Nair (The City College of New York)

Date : Wednesday, 31st January 2024

Time : 03:45 PM (IST)

Abstract : There are parametrizations of nonabelian gauge fields on complex spaces which facilitate nonperturbative analyses. In three dimensions this has led to analytic predictions for the string tension. I will update the status of this including corrections. I will discuss a new observable, the Casimir energy arguing that it could be a good probe of the magnetic mass for the quark-gluon plasma. I will review the lattice comparison for the 3d case, comment on entanglement and then discuss a similar strategy for gauge theories in 4d. A key feature in four dimensions is the emergence of a kinematic sector controlled by a 4d WZW theory.

Venue : Offline: Emmy Noether Seminar Room

Online: Please click on the below link to join the seminar

<https://icts-res-in.zoom.us/j/88092766911?pwd=R3ZrVk9yeW96ZmQ4ZG9KRzVhenRKZz09>

Meeting ID: 880 9276 6911

Passcode: 232322