



## **ICTS Skype Seminar**

Title : System of Hodge bundles and opers.

Speaker: Arideep Saha, The Institute of Mathematical Sciences, Chennai

Date: Monday, July 8, 2019

Time : 4:00 PM

Venue : Emmy Noether Seminar Room, ICTS Campus, Bangalore

Abstract: We would begin the talk with the notion of (semi)-stability of vector bundles and Higgs-bundles. A result of Simpson states that a vector bundle with a connection admits a filtration, such that, a naturally corresponding Higgs-bundle is semistable. One can start with a given filtration and try to give conditions on the filtration, such that, a connection preserving the filtration exists and the corresponding Higgs-bundle is semistable. In this talk we would discuss a few results towards semistability of Higgs-bundle from semistability of the graded components of the filtration.