

ICTS Special Seminar

Title : Nahm equations, stratified hyperkahler spaces and the Moore-Tachikawa category

Speaker : Maxence Mayrand, University of Oxford, UK

Date : Friday, March 31, 2017

Time : 3:30 PM

Venue : Emmy Noether Seminar Room, ICTS Campus, Bangalore

Abstract : Nahm equations are the reduction of the self-dual Yang-Mills equations to one-dimension. By considering the moduli space of solutions to such equations on different intervals and with appropriate boundary conditions, we get a plethora of examples of hyperkahler manifolds. I will review this theory and link it with an interesting conjectural TQFT with values in a category of hyperkahler manifolds. Finally, I will introduce a family of stratified hyperkahler spaces constructed with Nahm equations and whose stratification can be described explicitly using combinatorial data associated to a root system.