



Mathematics and CS Seminar

The $P=W$ conjecture on the moduli space of rank 2 Higgs bundles

Simone Melchiorre Chiarello (University of Geneva)

Host: Tamas Hausel

The cohomology ring of the moduli space of stable Higgs bundles over a Riemann surface is endowed with two filtrations: the weight filtration of mixed Hodge theory and the perverse filtration coming from the Hitchin system. The fact that these two filtrations coincide was proved by De Cataldo, Hausel and Migliorini in 2012 for the rank 2 case using geometric methods, while for higher ranks it is still unproven. In recent joint work with Hausel and Szenes, we give a new enumerative proof for rank 2 case. These methods might be extended to any rank. I will illustrate the main ideas of the proof and the problems that arise.

Thursday, April 5, 2018 01:00pm - 03:00pm

IST Austria Campus Big Seminar room Ground floor / Office Bldg West (I21.EG.101)



This invitation is valid as a ticket for the IST Shuttle from and to Heiligenstadt Station. Please find a schedule of the IST Shuttle on our webpage: <https://ist.ac.at/en/campus/how-to-get-here/> The IST Shuttle bus is marked IST Shuttle (#142) and has the Institute Logo printed on the side.