Seminar/Talk

Parabolic geometries, BGG sequences and geometry at infinity

Andreas Cap
University of Vienna

Host: Tamas Hausel

Generalized flag varieties are homogeneous spaces of the form G/P, where G is a semisimple Lie group and P is a parabolic subgroup of G. If G is a complex semisimple group, these are exactly the compact homogeneous spaces of G and they are known as rational homogeneous varieties. I will start by exhibiting a geometric content in the action of G on G/P, thus leading to the idea of parabolic geometries. Next, I will discuss BGG (Bernstein-Gelfand-Gelfand) sequences based on a refinement of twisted de Rham complexes over G/P. In the second part of the talk, I will outline how this theory can be applied to the study of geometric compactifications and how it leads to several generalizations of the concept of conformally compact manifolds.

Thursday, March 29, 2018 01:00pm - 03:00pm
Big Seminar room Ground floor / Office Bldg West (I21.EG.101)

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