



## Mathematics and CS Seminar

# Higgs bundles and the topology of higher Teichmüller spaces

**Oscar Garcia-Prada**

ICMAT, Madrid

Host: Tamas Hausel

It is well-known that the Teichmüller space of a compact surface can be identified with a connected component of the moduli space of representations of the fundamental group of the surface in  $PSL(2, \mathbb{R})$ . Higher Teichmüller spaces are generalizations of this for certain non-compact real Lie groups of higher rank. Using the theory of Higgs bundles, we can exploit the non-abelian Hodge correspondence and the more recently obtained Cayley correspondence, to address the study of the topology of higher Teichmüller spaces. In particular, we will compute the intersection cohomology of certain singular higher Teichmüller spaces.

**Thursday, January 18, 2024 01:00pm - 03:00pm**

Heinzel Seminar Room (I21.EG.101), Office Building West, ISTA



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