## Geometry, Groups and Dynamics/GEAR Seminar (held at the Illinois hub of GEAR)

## 12:00 pm, Thursday, October 19, 2017, 243 Altgeld Hall Maxime Bergeron (University of Chicago)

## The Topology of Representation Varieties

Let H be a finitely generated group, let G be a complex reductive algebraic group (e.g. a special linear group) and let K be a maximal compact subgroup of G (e.g. a special unitary group). I will discuss exceptional classes of groups H for which there is a deformation retraction of Hom(H,G) onto Hom(H,K), thereby allowing us to obtain otherwise inaccessible topological invariants of these representation spaces.

<u>Video</u>