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

12:00 pm, Tuesday, November 28, 2017, 243 Altgeld Hall

Laura Schaposnik (University of Illinois at Chicago)

On Cayley and Langlands type correspondences for Higgs bundles

The Hitchin fibration is a natural tool through which one can understand the moduli space of Higgs bundles and its interesting subspaces (branes). After reviewing the type of questions and methods considered in the area, we shall dedicate this talk to the study of certain branes which lie completely inside the singular fibres of the Hitchin fibrations. Through Cayleyand Langlands type correspondences, we shall provide a geometric description of these objects, and consider the implications of our methods in the context of representation theory, Langlands duality, and within a more generic study of symmetries on moduli spaces.

<u>Video</u>