



Contribution ID: 30

Type: **not specified**

## Higgs bundles, branes and applications

*Thursday, 30 June 2016 15:30 (25 minutes)*

We shall begin the talk by first introducing Higgs bundles for complex Lie groups and the associated Hitchin fibration, and recalling how to realize Langlands duality through spectral data. We will then look at a natural construction of families of subspaces which give different types of branes, and explain how the topology of some of these branes can be described by considering the spectral data. Finally, we shall give some applications of the above approaches in relation to Langlands duality, and representations of 3-manifolds. Some of the work presented during the talk is in collaboration with David Baraglia (Adelaide) and Steve Bradlow (UIUC) and Nigel Hitchin (Oxford).

### Summary

**Presenter:** SCHAPOSNIK, Laura (University of Illinois at Chicago)

**Session Classification:** Plenary session