Contribution ID: **13** Type: **not specified**

Symplectic duality and Langlands duality

Friday 8 February 2019 11:00 (1 hour)

In this talk I would like to sketch how one can use the tools of derived symplectic geometry and holomorphically twisted gauge theories to derive a relationship between symplectic duality and local Langlands. Our starting point will be an observation due to Gaiotto-Witten that a $3d\,\mathcal{N}=4$ theory with a G flavor symmetry is a boundary condition for $4d\,\mathcal{N}=4$ SYM with gauge group G. By examining the relationship between boundary observables and bulk lines we will be able to derive constructions originally due to Braverman, Finkelberg, Nakajima. By examine the relationship between boundary lines and bulk surface operators one can derive new connections to local geometric Langlands.

This is based on joint work with Philsang Yoo, Tudor Dimofte, and Davide Gaiotto.

Presenter: HILBURN, Justin

Session Classification: Justin Hilburn: Symplectic duality and Langlands duality