

# Center For Neutrino Special Seminar

**Special Time**

**Dr. Hee Cheol Kim**

**Harvard University**

Monopoles and Vortices in 3d N=4 gauge theories

**Wednesday, October 12, 2016**

**2:30 PM - 3:30 PM**

**304 Robeson Hall**

In 3d gauge theories, monopole operators create and destroy vortices.

The monopole operators generate an interesting algebra which naturally acts on vortex states. In this talk, I will show how to construct these 3d monopole operators in the 1d quantum mechanics describing the moduli space of vortices and also show that the quantum algebra generated by monopole operators can be obtained from localization computation.