

# Special TEP Seminar

UCLA

*Wednesday, January 25 @ 11:00 AM*

*Physics & Astronomy Building (PAB) 4-330*

## The twisted superpotential of 3d $N=2$ theories

**Brian Willett** (UCSB)

We consider the effective twisted superpotential of 3d  $N=2$  gauge theories compactified on a circle. This is a rich, duality-invariant observable which encodes much of the protected information in these theories. We review its properties, and survey some applications, including deriving the quantum algebra of Wilson loop operators, computing a wide class of supersymmetric partition functions, and studying the reduction of 3d dualities to two dimensions.