

## **Richard Eager: Elliptic genera of pure gauge theories in two dimensions**

*Sunday, May 23, 2021 9:00 AM (50 minutes)*

Abstract: I will explain how to compute the elliptic genera of (2,2) supersymmetric gauge theories in two dimensions with gauge group  $G/\Gamma$  (for  $G$  semisimple and simply-connected,  $\Gamma$  a subgroup of the center of  $G$ ) with various discrete theta angles. The two new ingredients are a systematic study of the moduli space of flat  $G/\Gamma$  connections on the torus and an efficient organization of the supersymmetric localization computation using the classification of nilpotent orbits. The elliptic genera are consistent with expectations from decomposition of two-dimensional theories with finite global one-form symmetries and with computations of supersymmetry breaking for some discrete theta angles in pure gauge theories.