## BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

## MODULI OF VECTOR BUNDLES ON CURVE AND SEMIORTHOGONAL DECOMPOSITION

Kai Xu

Harvard University

CCDS 365, Apr 3, 2024, 4-5pm

Tea: 3:45pm in Room 365

Abstract: In this talk we construct semiorthogonal decompositions of moduli of vector bundles on a curve into its symmetric powers. The essential ingredients in the proof include Borel-Weil-Bott theory for loop groups, derived Schur-Weyl duality for current groups and derived  $\Theta$ -stratification. We also discuss its relationship with four-dimensional gauge theory.

See http://math.bu.edu/research/geom/seminar.html or contact Yu-Shen Lin (vslin@bu.edu) or Brian Williams (bwill22@bu.edu) for more information.