

BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

CUTTING-GLUING IN HEEGAARD-FLOER THEORY WITH COEFFICIENT

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CCDS 365, Jan 22, 2024, 4-5pm

Tea: 3:45pm in Room 365

Abstract: Just as Heegaard-Floer (HF) theory is about Fukaya categories for symmetric product of Riemann surfaces, HF theory with coefficient is about Fukaya categories of horizontal Hilbert scheme (possibly with fiberwise superpotential). This is used to give a symplectic realization of categorified quantum group representation. The method of cutting and gluing Riemann surface can be used to take tensor product of categorified representations. I will give the example when $g = sl_2$. This is work in progress, partly joint with Vivek Shende, and partly joint with Mina Aganagic, Elise LePage, Yixuan Li.

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