

BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

A PROOF OF THE FFKM TILTING CONJECTURE

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CCDS 365, September 24, 2025, 4-5pm

Abstract: In their 1997 paper on semi-infinite flags, Feigin, Finkelberg, Kuznetsov, and Mirković constructed a remarkable action of the Langlands dual Lie algebra on the intersection cohomology of the space of quasimaps into a flag variety. Moreover, they conjectured that this representation is tilting and explained how this is equivalent to a conjectural spectral description of the representation. I'll sketch a proof of this conjecture, which is joint work in progress with Andreas Hayash. Our strategy is to construct a purely local version of the FFKM action and then use chiral homology to pass from local to global.

See <http://math.bu.edu/research/geom/seminar.html> or contact Siu-Cheong Lau (sclouis@bu.edu) or Brian Williams (bwill22@bu.edu) for more information.