Dear all,

This week, Sasha Minets from The University of Edinburgh will give a talk at our Algebra and Geometry Seminar. Details are below (but as usual, they can also be found here). It'll be an in-person talk in 5564. Please note the unusual time: 11 am, Wednesday, May 10.

Best,
Quoc

Title: A proof of ______ conjecture
Abstract: Let \( C \) be a smooth projective curve. The non-abelian Hodge theory of Simpson is a diffeomorphism between the character variety \( \text{Char}(G) \) of \( G \) and the moduli of (semi)stable Higgs bundles \( \text{M}(G) \) on \( C \). Since this diffeomorphism is not algebraic, it induces an isomorphism of cohomology rings, but does not preserve finer information, such as the weight filtration. Based on computations in small rank, de Cataldo-Hausel-Migliorini conjectured that the weight filtration on \( \text{M}(G) \) gets sent to the perverse filtration on \( \text{Char}(G) \), associated to the Hitchin map. In this talk, I will explain a recent proof of this conjecture, which crucially uses the action of Hecke correspondences on \( \text{Char}(G) \). Based on joint work with T. Hausel, A. Mellit, O. Schiffmann.