

## Tamás Hausel: **Arithmetic of wild character varieties**

We start with some conjectures, originating both in arithmetic and physics, on the mixed Hodge polynomials and perverse Hodge polynomials of tame character varieties and moduli of parabolic Higgs bundles on Riemann surfaces. We will then study the arithmetic of one class of Boalch's wild character varieties using the character theory of Yokonuma-Hecke algebras yielding a conjecture on their mixed Hodge polynomials. We will comment on how refined link invariants show up in our formulas, and also how the pure part is related to the  $t$ -adic geometry of some quiver varieties. These are joint works with Martin Mereb, Michael Wong and Dimitri Wyss.