## Philadelphia Area Number Theory Seminar

## **Brett Frankel**

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## Counting Points on Representation Varieties

Abstract: In "Mixed Hodge polynomials of character varieties," Tamás Hausel and Fernando Rodriguez-Villegas examine the representation and (twisted) character varieties of fundamental groups of compact Riemann surfaces. I will briefly sketch their motivation and the combinatorial techniques they use, before turning to the question: What can we say if instead of a compact Riemann surface, we consider a complete curve over a field of positive characteristic? I will share some preliminary results which give combinatorial answers to this question in various special cases.

Wednesday, February 25, 2015 2:40-4:00PM

Bryn Mawr College
Department of Mathematics
Park Science Center **328**Tea and refreshments at 2:20PM in Park 355