

Philadelphia Area Number Theory Seminar

Will Grodzicki
Lafayette College

Six-Vertex Lattice Models and p -Adic Matrix Coefficients

Abstract:

Originally developed independently by physicists (for use in statistical mechanics) and combinatorialists (to study alternating sign matrices), six-vertex models have recently found applications in probability and p -adic representation theory. In particular, there are six-vertex models whose partition functions evaluate to values of various p -adic matrix coefficients, e.g. Whittaker functions. In this talk, I will discuss prospective lattice models whose partition functions appear to give type B/C Hall-Littlewood polynomials. This is ongoing joint work with Ben Brubaker and Andy Schultz.

Thursday, October 21, 2021
3:25 - 4:45 PM

Bryn Mawr College
Department of Mathematics
Park Science Center 245

Informal refreshments at 3:10 PM in Park 361