

# Philadelphia Area Number Theory Seminar

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## 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