1113-06-212 **John Engbers***, 340 Cudahy, PO BOX 1881, Milwaukee, WI 53201, and **Adam Hammett**.

How often do two monotone triangles meet in the minimal element?

A monotone triangle of size n (or Gog triangle, in Zeilberger's terminology) is a left-justified triangular array of positive integers, with i integers in row i and last row $n = (1, 2, ..., n)$, with the property that the integers weakly increase up columns and downward-right diagonals, and strictly increase across rows. Endowed with entry-wise comparisons, the collection of monotone triangles of size n becomes a poset that is a lattice, and this lattice is isomorphic to the smallest completion of the Bruhat order on S_n to a lattice. The set of monotone triangles of size n can be transformed bijectively into a number of sets of combinatorial objects, including the set of $n \times n$ alternating sign matrices.

Pittel and Canfield previously answered how often a randomly chosen set partition had trivial meet (or join), with answers to this question later being given for the lattice of set partitions of type B by Chen and Wang and for the weak order on S_n by the second author. In this talk, we consider the analogous problem for the lattice of monotone triangles, and give sharp asymptotics for the probability that r uniformly random monotone triangles meet (join) in the minimal (maximal, resp.) element. (Received August 22, 2015)