On Hamilton Cycles in Random Hypergraphs

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In this talk, we present some recent developments concerning the Hamiltonicity of random hypergraphs. In particular, we show that p = e/n is a sharp threshold for the existence of tight Hamilton cycles in random k-uniform hypergraphs of order n (each possible k-tuple appears independently with probability p). We also determine the thresholds for the existence of other types of Hamilton cycles (including loose cycles).

This is joint work with Alan Frieze.