

---

**ANDRZEJ DUDEK**, Western Michigan University

*On Hamilton Cycles in Random Hypergraphs*

In this talk, we present both old and new developments concerning the Hamiltonicity of random hypergraphs. First, we consider random  $k$ -uniform hypergraphs of order  $n$  (each possible  $k$ -tuple appears independently with probability  $p$ ) and determine the thresholds for the existence of different types of Hamilton cycles (including loose and tight cycles). Next, we discuss some very recent results about Hamiltonicity of random regular hypergraphs (joint work with Alan Frieze, Andrzej Ruciński, and Matas Šileikis). In doing so, we partially answer a question of Kim and Vu about “sandwiching random graphs”.