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John Lenz* (lenz@math.uic.edu). *Hamilton cycles in quasirandom hypergraphs.*

A recent area of interest in extremal hypergraphs is discovering conditions (for example, various degree conditions) which force perfect matchings or various spanning cycles. The minimum 1-degree condition seems to be quite hard; the 1-degree threshold for a perfect matching is known only for 3 and 4 uniform hypergraphs. Extending recent work, we proved that a weak minimum 1-degree condition together with a quasirandomness condition is enough to guarantee a loose Hamilton cycle. In this talk I will overview these recent results together with constructions showing the theorems are asymptotically best possible. (This is joint work with Dhruv Mubayi and Richard Mycroft.) (Received January 20, 2015)