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*Hamilton cycles in 3-out*

We consider the existence of Hamilton cycles in the random graph 3-out. In this model, each of the  $n$  vertices independently chooses 3 incident edges. We show that with high probability this graph has a Hamilton cycle. The proof relies in part on the analysis of a simple greedy algorithm. We use the differential equation method to model this. Numerical computations with double precision, *etc.*, verify what we need for the outcome of this process. We are currently working on a rigorous global error analysis.

Joint work with Tom Bohman.