1138-05-322 **Dieter Mitsche**, **Michael Molloy*** (molloy@cs.toronto.edu) and **Pawel Pralat**. *Regular subgraphs of a random graph.*

The threshold for a random graph to have a subgraph with minimum degree $k \geq 3$ (i.e. a k-core) has been well understood for decades: Pittel, Spencer and Wormald determined that it is equal to $c_k n$ for a particular constant c_k. The threshold for a random graph to have a k-regular subgraph still eludes us. Bollobas, Kim and Verstraete conjecture that the two thresholds are different and prove this for $k = 3$.

We prove that the thresholds are very close: the regular subgraph threshold is at most $(c_k + e^{-k/100})n$ for large k. (Received February 12, 2018)