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sarah-marie belcastro* (smbelcas@toroidalsnark.net) and **Michael Young**. *The Excess Range of Factorizations of Regular Graphs*. Preliminary report.

An *excessive factorization* of a regular graph G is a set of 1-factors that covers all edges of G without redundancy (that is, no subset also covers all edges of G). For k -regular G , the smallest possible number of 1-factors in an excessive factorization is k . Because there are no “extra” factors, we say that a graph with a 1-factorization has minimum *excess* zero. Note that when the G is $(k+1)$ -edge chromatic, the minimum excess is either positive or nonexistent (if there exists an edge contained in no 1-factor). We consider the possible excess numbers of regular graphs, and focus in this talk on regular graphs with both minimum and maximum excess equal to zero. (Received September 21, 2009)