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Eva Czabarka* (czabarka@math.sc.edu), **Johannes Rauh**, **Kayvan Sadeghi**, **Taylor Short**
and **Laszlo A Szekely**. *The maximum number of nonzero entries in a joint degree vector.*

The joint degree vector of an n -vertex graph gives the number of edges between vertices of degree i and degree j for $1 \leq i < j \leq n - 1$. The number of nonzero entries of this graph provides an upper bound on the number of estimable parameters in the exponential random graph model with bidegree-distribution as its sufficient statistics. We find lower and upper bounds for this quantity as a function of n . (Received August 20, 2016)