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**Daniel Král', Bernard Lidický\*** (lidicky@iastate.edu), **Táisa L. Martins** and **Yanitsa Pehova**. *Decomposing graphs into edges and triangles.*

We prove the following 30-year old conjecture of Győri and Tuza: the edges of every  $n$ -vertex graph  $G$  can be decomposed into complete graphs  $C_1, \dots, C_\ell$  of orders two and three such that  $|C_1| + \dots + |C_\ell| \leq (1/2 + o(1))n^2$ . This result implies the asymptotic version of the old result of Erdős, Goodman and Pósa that asserts the existence of such a decomposition with  $\ell \leq n^2/4$ . (Received August 20, 2018)