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Tao Jiang*, Dept. of Mathematics, Miami University, Oxford, OH 45056. *Many Turán exponents via subdivisions.*

Given a graph H and a positive integer n , the *Turán number* $ex(n, H)$ is the maximum number of edges in an n -vertex graph that does not contain H as a subgraph. A real number $r \in (1, 2)$ is called a *Turán exponent* if there exists a bipartite graph H such that $ex(n, H) = \Theta(n^r)$. A long-standing conjecture of Erdős and Simonovits states that $1 + \frac{p}{q}$ is a Turán exponent for all positive integers p and q with $q > p$.

In this talk, we build on recent developments on the conjecture to establish a large family of new Turán exponents. It follows from our main result that $1 + \frac{p}{q}$ is a Turán exponent for all positive integers p and q with $q > p^2$. Our main result also partially resolves a recent conjecture of Janzer. This is joint work with Yu Qiu. (Received September 08, 2019)