1161-05-39 **Tao Jiang**, **Zilin Jiang*** (zilinj@mit.edu) and **Jie Ma**. *Negligible obstructions and Turán exponents.*

The conjecture on the realizability of rational exponents states that for every rational number r in $(1,2)$ there is a graph F_r such that $\mathrm{ex}(n,F_r)=\Theta(n^r)$. In their beautiful work, Bukh and Conlon resolved a weaker version of the conjecture, where F_r is allowed to be a finite family of graphs. Subsequent work has been focusing on narrowing this family down to a single graph. We formulate a framework, that is taking shape in recent work, to attack the conjecture on the realizability of rational exponents. As an application of the framework, we show that for every rational number $r \in (1,2)$ of the form $2-a/b$, where $a,b \in \mathbb{N}^+$ satisfy $\lfloor a/b \rfloor^3 \le a \le b/(\lfloor b/a \rfloor + 1) + 1$, there exists a graph F_r such that the Turán number $\mathrm{ex}(n,F_r)=\Theta(n^r)$. Joint work with Tao Jiang and Jie Ma. (Received August 02, 2020)