

Wilf's Problem

$$f(n, m, \lambda) = \max \{ P_G(\lambda) : G \in \mathcal{G}_{n, m} \}$$

n vertices
m edges

$\lambda=2$ is easy

Conjecture (Lazebnik '87) $\forall 0 \leq m \leq n^2/4$

each $f(n, m, 3)$ -extremal gr. is bipartite

semi-complete with isolated vertices



Sudakov & P: solved $\lambda=3$ for $\forall m \geq m_0$

Evolution (as m increases):

