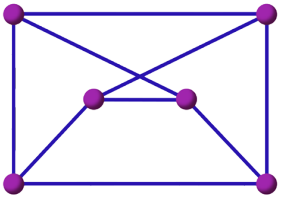

SEMINARIUM
MATEMATYKA DYSKRETNA

wtorek, 9 czerwca 2026 r., godz. 12:30, s. 612 C7

Polowanie na pająki o długich nogach

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Hons, Klimošová, Kucheriya, Mikšaník, Tkadlec, and Tyomkyn proved that, for every integer $\ell \geqslant 1$, every directed graph with minimum out-degree at least $3.23 \cdot \ell$ contains a $(2, \ell)$-spider (a 1-subdivision of the in-star with ℓ leaves) as a subgraph. They also conjectured that the bound on the minimum out-degree can be further improved to 2ℓ. In this note, we confirm their conjecture by showing that every directed graph with minimum out-degree at least 2ℓ contains a $(2, \ell)$-spider as a subgraph. This result is best possible, as the complete directed graph with 2ℓ vertices does not contain a $(2, \ell)$-spider.