

# Dense induced bipartite subgraphs in triangle-free graphs

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Erdős, Faudree, Pach and Spencer (1988) introduced the problem of searching for large induced bipartite subgraphs in triangle-free graphs. We consider a variant of this problem, where the objective is to find induced bipartite subgraphs with large minimum degree. Specifically, we prove that every triangle-free graph with minimum degree  $d$  contains an induced bipartite graph with minimum degree at least  $c \log d / \log \log d$ , thus nearly confirming a conjecture of Esperet, Kang and Thomassé.

This is joint work with Matthew Kwan, Benny Sudakov and Tuan Tran.