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Title. A degree sequence Komlós theorem

Abstract. Given graphs G and H, we define an H-*tiling in G* to be a collection of vertex-disjoint copies of H in G. Let $\varepsilon > 0$. We call an H-tiling *perfect* if it covers all of the vertices in G and ε-*almost perfect* if it covers all but at most an ε-proportion of the vertices in G. An important theorem of Komlós [1] provides the minimum degree of G which ensures an ε-almost perfect H-tiling in G. We present a degree sequence strengthening of this result. This is joint work with Hong Liu and Andrew Treglown.

Using the aforementioned theorem of Komlós [1], Kühn and Osthus [2] determined the minimum degree of G that ensures a perfect H-tiling in G. We present a degree sequence version of their result as an application of our degree sequence Komlós theorem. This is joint work with Andrew Treglown.

References

[1] J. Komlós, *Tiling Turán Theorems*, Combinatorica, **20**, (2000), 203-218.
[2] D. Kühn and D. Osthus, The minimum degree threshold for perfect graph packings, *Combinatorica* **29** (2009), 65-107.