

PARTITIONING A TOURNAMENT INTO POWERS OF PATHS

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ABSTRACT. In this talk, we will survey some recent results on how to embed large structures into any tournament. Recently, Draganic, Dross, Fox, Girão, Havet, Korándi, Lockett, Munhá Correia, Scott, and Sudakov, showed that every tournament on n vertices contains a k -th power of a path of length greater than $O(kn/2^{4k})$. Together with Korandi, and Scott we extended this result. More, precisely we show that for every positive integer k , any tournament can be partitioned into at most 2^{c_k} k -th powers of paths. This result is tight up to the exponential constant.

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