

1108-05-475

Deepak Bal* (baldc@miamioh.edu) and **Louis DeBiasio**. *Monochromatic Cycle Partitions of Random Graphs*.

We say that a graph G has property \mathcal{L} if in every 2-coloring of the edges of G there exists a red cycle and blue cycle which are vertex disjoint and which partition the vertex set of G . It was conjectured by Lehel that K_n has property \mathcal{L} and this was confirmed for large n by Łuczak, Rödl, and Szemerédi and with a better value of n by Allen. Bessy and Thomassé gave a proof for all n . In this talk we explore property \mathcal{L} and an approximate version when $G \sim G(n, p)$, the Erdős-Rényi random graph. (Received January 20, 2015)