

1120-05-299

Patrick Bennett* (patrick.bennett@wmich.edu), **Andrzej Dudek** (andrzej.dudek@wmich.edu), **Alan Frieze** (af1p@andrew.cmu.edu) and **Laars Helenius** (laars.c.helenius@wmich.edu). *The 1-2-3 conjecture for uniform hypergraphs.*

Given an r -uniform hypergraph $H = (V, E)$ and a weight function $\omega : E \rightarrow \{1, \dots, w\}$, a coloring of vertices of H , induced by ω , is defined by $c(v) = \sum_{e \ni v} \omega(e)$ for all $v \in V$. If there exists such a coloring that is strong (that means in each edge no color appears more than once), then we say that H is strongly w -weighted. Similarly, if the coloring is weak (that means there is no monochromatic edge), then we say that H is weakly w -weighted. In this talk we will discuss the strong- and weak-weightedness of k -uniform hypergraphs, particularly random hypergraphs. (Received February 23, 2016)