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**A. Kostochka** and **M. Yancey\*** (yancey1@illinois.edu). *Large Rainbow Matchings in Graphs.*

A *rainbow matching* in an edge-colored graph is a matching in which all the edges have distinct colors. For vertex  $v$ , let  $\hat{d}(v)$  be the *color degree* of  $v$ , or the number of distinct colors on the edges incident to  $v$ . Let  $\hat{\delta}(G)$  be the minimum color degree among vertices of  $G$ . We present several anti-Ramsey results about  $rm(G)$ , the size of the largest rainbow matching in  $G$ . We prove the conjecture by Wang and Li that  $rm(G) \geq \lceil \frac{k}{2} \rceil$  when  $\hat{\delta}(G) \geq k \geq 4$ . We further show that  $rm(G) \geq \hat{\delta}(G)$  when  $n > 50\hat{\delta}(G)^3$ . Both results are sharp. (Received August 23, 2011)