

1120-13-244

**Jennifer Biermann\*** (jbierman@mtholyoke.edu), **Augustine O’Keefe** and **Adam Van Tuyl**.

*A lower bound on the regularity of toric ideals of graphs.* Preliminary report.

Let  $G$  be a finite simple graph. We find a lower bound for the Castelnuovo-Mumford regularity for the toric ideal  $I_G$  associated to  $G$  in terms of the sizes and number of induced complete bipartite graphs in  $G$ . (Received February 22, 2016)