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**Colin Defant** and **Sumun Iyer\*** ([ssi1@williams.edu](mailto:ssi1@williams.edu)). *Domination of unitary Cayley Graphs.*

The unitary Cayley graph of  $\mathbb{Z}/n\mathbb{Z}$ , denoted  $X_{\mathbb{Z}/n\mathbb{Z}}$ , has vertices  $0, 1, \dots, n - 1$  with  $x$  adjacent to  $y$  if  $x - y$  is relatively prime to  $n$ . We observe that every unitary Cayley graph is a direct product of balanced, complete multipartite graphs. We present results on the quality of known upper bounds for the domination number of  $X_{\mathbb{Z}/n\mathbb{Z}}$ . Extending work of Mekiš, we give lower bounds for the domination numbers of direct products of complete graphs. We also present a conjecture for the exact values of the upper domination numbers of direct products of balanced, complete multipartite graphs, prove the conjecture in certain cases, and pose the remaining cases as an open question. (Received September 21, 2017)