

## Distinguishing chromatic numbers of circulant graphs

Michael D. Barrus\*, Benjamin Lantz, University of Rhode Island; Jean Guillaume, Sacred Heart University

The distinguishing chromatic number of a graph  $G$  is the minimum number of colors needed to properly color the vertices so that no nontrivial symmetry of  $G$  preserves the coloring. We survey values for and bounds on the distinguishing chromatic number of circulant graphs with connection set  $\{\pm 1, \pm k\}$ .