1159-05-73 **Jean A Guillaume*** (guillaumej@sacredheart.edu), 933 East 79th Street, Brooklyn, NY 11236. *The NGD-Circulant Graphs of the Form $C_n(1,k)$.*

Nordhaus and Gaddum showed, for any given graph G, that $\chi(G) + \chi(\overline{G}) \leq n+1$, where χ denotes the chromatic number and n the number of vertices. Collins and Trenk established an analogous result for the distinguishing chromatic number. They proved, for any graph G, that $\chi_D(G) + \chi_D(\overline{G}) \leq n + D(G)$, where $D(G)$ is the distinguishing number of the graph. They called the class of graphs that satisfy equality in this bound NGD-graphs after Nordhaus and Gaddum. In this talk, we present our investigation of the distinguishing chromatic number for the complements of circulant graphs $G = C_n(1,k)$. We also discuss our characterization of the NGD-graphs for this particular class of graphs as well as our improvement of the bound of Collins and Trenk for this family. Lastly, we show how to extend our investigation of the distinguishing chromatic number to a larger class of circulant graphs $G = C_n(1, k_1, \cdots, k_m)$.

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