Lower Bounds for the Exponential Domination Number of $C_m \times C_n$

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This talk will discuss the exponential domination number, denoted by $\gamma_e(G)$, for the graph $G = C_m \times C_n$. In the paper, *On Exponential Domanation of $C_m \times C_n$*, Anderson et. al. proved that $\frac{mn}{15.875}$ is a lower bound for $\gamma_e(C_m \times C_n)$. We use a linear programming to sharpen the lower bound to $\frac{mn}{13.7619+\epsilon}$.

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