Douglas Rall and Kirsti Wash* (kirsti.wash@trincoll.edu), 300 Summit Street, Mathematics Department, Hartford, CT 06114. Identifying codes in the Cartesian product of a graph and $K_2$.

An identifying code in a graph is a dominating set that also has the property that the closed neighborhood of each vertex in the graph has a distinct intersection with the set. The minimum cardinality of an identifying code in a graph $G$ is denoted $\gamma_{ID}(G)$. Due to the nature in which this parameter arose, identifying codes in the Cartesian product are studied as early as the very first paper to appear on the topic by Chakrabarty et al. In this talk, we focus on identifying codes in the Cartesian product of a graph $G$ and $K_2$, known as the prism of $G$. We investigate general bounds for $\gamma_{ID}(G\square K_2)$ for any graph $G$, and we identify a class of graphs for which $\gamma_{ID}(G\square K_2)$ is no larger than $\gamma_{ID}(G)$. (Received September 14, 2015)