1145-VP-1463   **Michael Kerckhove*** (`mkerckho@richmond.edu`) and **Hassan Naveed**. *Diffusion of Innovations on Strongly Regular Graphs.*

For many innovations, potential users choose between an objectively better product and the product currently prevalent within their local social network. Two-colored graphs provide a structure by which to investigate this problem. We use the following adoption rule: if a weak majority of its neighbors are using the innovation, a vertex will switch to the innovation. A dynamic majority is a subset of vertices such that if these vertices adopt the innovation initially, then eventually all vertices will share their color. We establish a lower bound in terms of the graph parameters for the minimum size of a dynamic majority in any strongly regular graph and illustrate patterns of dynamic majorities in graphs that achieve this lower bound. (Received September 22, 2018)