1163-05-1390 **Sarah E. Anderson**, University of St. Thomas, St. Paul, MN, **Karen L. Collins**, Wesleyan University, Middletown, CT, **Daniela Ferrero*** (dferrero@txstate.edu), Department of Mathematics, Texas State University, San Marcos, TX 78666, **Leslie Hogben**, American Institute of Mathematics, San Jose, CA, and Iowa State University, Ames, IA, **Carolyn Mayer**, Worcester Polytechnic Institute, Worcester, MA, and Sandia National Laboratories, Albuquerque, NM, **Ann N. Trenk**, Wellesley College, Wellesley, MA , and **Shanise Walker**, University of Wisconsin-Eau Claire, Eau Claire, WI. *Product Throttling for Power Domination.*

Power domination is a particular form of graph searching in which an initial step of standard graph domination is followed by a zero forcing process. Power domination was introduced independently from zero forcing, as a model for the monitoring process of electrical power networks. As electrical power systems become increasingly more complex, so does their monitoring process. Initially aimed at preventing blackouts and power surges, nowadays the infrastructure used for monitoring power systems is also used to enhance the quality of their service. As a result, new questions about the power domination problem in graphs have also appeared.In particular, the interest on the trade-off between time and costs involved in a power domination process, leads to the study of product throttling for power domination. In this talk, we introduce the power domination problem and present the concept of power throttling number of a graph, which we present for certain graph families. Recent results, including bounds and a characterization of graphs with extremal product throttling numbers, will also be presented. (Received September 15, 2020)