1145-68-257 Rachid Ait Maalem Lahcen (rachid@ucf.edu), Department of Mathematics, University of Central Florida, Orlando, FL 32816, and R. N. Mohapatra* (ram.mohapatra@ucf.edu), Mathematics Department, University of Central Florida, Orlando, FL 32816. Vulnerability Analysis of networks and Attack Graphs.

he network infrastructure is the most critical technical asset of any organization. This network architecture must be useful, efficient, and secure. However, their cybersecurity challenges are immense as the number of attacks is increasing. Consequently, there is a need to have efficient tools to assess the risks, know the vulnerabilities, and find the solutions before the attackers exploit them. The challenges remain in integrating the vulnerability analysis tools in a holistic process that cyber defenders can use to detect an intrusion and respond quickly. Attack graphs are used in analyzing network security. In this talk, we present some instances of the use of attack graphs in analyzing vulnerability of a network/ (Received August 26, 2018)