

1135-00-1261 **Amanda E Francis*** (afrancis@carroll.edu), Amanda E Francis, Department of Mathematics, 1601 N Benton Ave, Helena, MT 59625. *Comparing two scoring options for link prediction in networks*. Preliminary report.

Given a network of known relationships between people in a social network, can you predict the most likely new relationship to form? There are various known methods for link prediction, for example, the Katz method counts the number of “paths” between people, and assigns a weight based on these counts. Alternately, we can use the mathematics of electrical resistor networks, assigning scores based on effective resistance. In this talk I give results comparing these two scoring methods on simple networks. (Received September 20, 2017)