Pietro Poggi-Corradini\* (pietro@math.ksu.edu). Theory and applications of p-modulus of families of walks on networks. Preliminary report.

I will review the theory of p-modulus for families of walks on networks and discuss a couple of numerical implementations. Then I will show through examples how the flexibility and generality of p-modulus makes it a suitable tool for applications to the study and modeling of epidemic spreading. (Received September 19, 2015)