Meeting: 1003, Atlanta, Georgia, AMS CP 1, AMS Contributed Paper Session

## 1003-11-1556 **Debra Czarneski\*** (debcza@math.lsu.edu). Theorems and Counterexamples Concerning the Zeta Function of a Finite Graph.

Ihara introduced the zeta function of a finite graph in 1966 in the context of p-adic matrix groups. This idea was generalized to all finite graphs in 1989 by Hashimoto. We will discuss several properties of finite graphs that are determined by the zeta function, and show by counterexample several properties of finite graphs that are not determined by the zeta function. (Received October 05, 2004)