1148-11-259 **Darren B Glass***, 300 North Washington St, Gettysburg, PA 17325. *Arithmetical Structures and Critical Groups of Graphs.* Preliminary report.

In this talk, we will discuss recent results with several coauthors about critical groups connected to various arithmetical structures on families of graphs More specifically, if A is the adjacency matrix of a graph G, we will consider which nonnegative diagonal matrices D one can choose so that the matrix $L = D - A$ has a vector whose entries are all positive integers in the null space, and we will consider the finite abelian groups that result as the cokernel of these matrices. (Received February 04, 2019)