

Algebra/Topology Seminar

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WEIGHTED BIPARTITE GRAPHS AND DETERMINANTS

Thursday, May 1, 2014
1:15 p.m. in ES-143

ABSTRACT. In this very introductory talk we will discuss how weighted bipartite graphs can be used to model maps between based free modules. In the special case when the two free modules have the same rank, we will investigate how to compute the determinant of the map via a matching in the corresponding bipartite weighted graph. Finally, we will see what consequences this has when the matching is acyclic (acyclic matchings are exactly the kind of matchings that arise in Discrete Morse Theory).