The University of Mississippi

Department of Mathematics

Departmental Colloquium

Dr. Sean Sather-Wagstaff
North Dakota State University

Structure of homomorphism sets, and generalizations

Friday, February 26, 2010
2:00 P.M.
Hume 101

Abstract: Let f: V -> W be a linear transformation between finite dimensional vector spaces. A classical theorem from linear algebra states that f can be represented by a matrix, once bases for V and W have been specified. In particular, this implies that the set Hom(V,W) of all such linear transformations is itself a finite dimensional vector space. We will discuss the question of what happens when the vector space assumption is relaxed and one considers higher-dimensional versions of Hom(V,W). This talk will be accessible to graduate students.

Faculty, Staff and Students are welcome to attend