# Rigoberto Flórez (South Carolina at Sumter)

## Harmonic Conjugation and Projective Rectangles

## Abstract for the Combinatorics Seminar 2010 May 23

Harmonic conjugation, a fundamental property in projective geometry, extends to matroids. A *projective rectangle* is a generalization of a projective plane, where not every two lines intersect. In this talk I discuss the construction of a projective rectangle using the matroid generalization of harmonic conjugation.