

1077-O1-2343 **Julie F Rogers*** (rogerjf@auburn.edu), 1961 Panda Ct., Auburn, AL 36832. *Hands-on Activity for Mutually Orthogonal Latin Squares.*

The hands-on latin square activity presented in this talk allows undergraduate students to physically play around with a set of 25 cards, each with a town and animal symbol on them, and place them in a 5x5 array such that each row and each column contains exactly one of each town and one of each animal. Once the students are able to succeed at this first task, they are given a third (how many more are possible??) characteristic, such as colors, to add to the cards so that each row and column contains exactly one of each color. Furthermore, each town and animal also receives exactly one of each color. Through this exploration they not only begin learning about mutually orthogonal latin squares, but also finite geometries and other applications can be introduced. This activity was successfully implemented during an NSF funded trip to Australia where graduate students ran math camps and interacted with teachers and students in aboriginal schools. (Received September 22, 2011)