

Pi Mu Epsilon

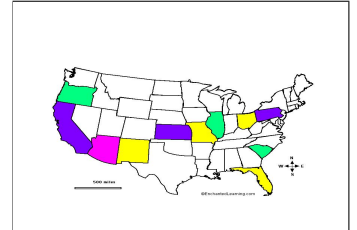
& GAMECOCK MATH CLUB



Michael Lane

Student Seminar

The Four Color Theorem



Can you finish coloring this map?

The four color theorem states that for any map, if we color the regions of the map so that regions with a common border are colored with different colors, then we will never need more than 4 colors. This was conjectured in 1852 and was not proven until 1976, **124** years later, with the aid of a supercomputer.

In this talk, we discuss the history of the theorem, transition it to the notion of planar graphs (with a few definitions to make the talk more accessible), and prove a few results along the way. Of particular interest is the simple elementary proof that only five colors are sufficient, and how this result came out of a failed proof for the four color theorem. We finally outline how the proof of the four color theorem was structured.

Thursday 22nd March 2012

6:30 pm

LeConte 310

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