The Faculty Areas of Research Seminar Series

## **Greg Brumfiel**

## Dessins d'enfants and real algebra

Abstract: The absolute Galois group of the rational numbers permutes graphs on surfaces, a phenomenon that might seem rather mysterious. In the framework of real algebra, one imposes the ordinary topology on complex varieties and morphisms exactly by bringing in conjugation and inequalities. But there are many conjugations, and it turns out that by varying the conjugation one sees different combinatorial topological structures hiding in one complex morphism. This talk is somewhat intended as a preview of my winter course on dessins d'enfants.

## Monday, December 4, 2006, 12:00-12:50pm, 383N

## refreshments will be provided

http://math.stanford.edu/~emalm/fars/