

THE MATHEMATICS DEPARTMENT PRESENTS

A MATHEMATICS COLLOQUIUM

THURSDAY, October 15, 2009

BOND HALL 401

4:00 pm

Title: Wallpaper groups

Speaker: Jobie Gores, Western Washington University

Abstract: A wallpaper group is a group of isometries whose translations are generated by two nonidentity translations. Each wallpaper group corresponds to a two-dimensional repetitive pattern. In the nineteenth century the classification of these groups began. One of the obstacles was determining when different patterns exhibited the same sort of regularity. The classification of these groups is based on a detailed understanding of the isometries in each group. It turns out that there are precisely 17 wallpaper groups, each of which corresponds to a pattern. These patterns are frequently seen in architecture and decorative art.

Refreshments will precede the talk at 3:30pm in Bond Hall 300, courtesy of Richard Gardner.