

Graduate Seminar

**Dr. Danny Dyer
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**Thursday, December 3, 2015
HH-3017, 1:00p.m.**

The Watchman problem

Abstract:

In a museum, the exhibits would be safest if they could all be watched all the time. Unfortunately, that's normally too expensive. Instead, with a limited number of watchmen, we'd like to have them patrol and keep things as safe as possible. One way to do this is to model the museum with a graph, and look for a short walk such that every vertex in the graph is adjacent to some vertex in the walk. The shortest possible walk is called the Watchman's walk. We will examine some known results, particularly regarding trees and block intersection graphs of Steiner Triple Systems.