

Mathematics Colloquium

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**Compact (and
Noncompact) Locally
Homogeneous Spaces**

Abstract: Starting from periodic tilings and Bieberbach Theorems, we will address the question of when does a homogeneous space G/H admit compact quotients. Positive and negative results will be given in this direction illustrating the wide range of technics involved here (cocycle rigidity, dynamical systems, representation theory...). The talk will follow the historical development of the subject and will remain elementary. Finally we will discuss more recent results on how to embed certain spaces of representations into moduli spaces of geometric structures.

Wednesday, October 14

**4:00-5:00 pm
204 Smith Hall**