

“Any statement can be generalized so that it becomes [a] trivial [notion].”

— D. K. Faddeev

“Algebra is the offer made by the devil to the mathematician. . . All you need to do, is give me your soul: give up geometry”

— Michael Atiyah

The Trivial Notions Seminar Proudly Announces

Lie Geometry

A talk by
Aliakbar Daemi

Abstract

Lie groups and Lie algebras form two important concepts in mathematics. There are some old results attempting to understand these objects. For example Cartan in a well-known theorem proved that any simple Lie group up to conjugacy has a unique maximal compact subgroup. Classical approaches to attack these problems need a good deal of theory. In this talk we will see how geometry helps us to prove generalizations of some of these theorems. Specifically I'll prove results about the structure of simple Lie algebras and Lie groups using methods of geometric invariant theory and Riemannian geometry.

Thursday March 29th, at 2:00 pm
Science Center 310