But why must the groups be smooth??

David Hilbert, 1900
[slightly paraphrased]

The Olivetti Club Presents

Iian Smythe

Tuesday 4:25 pm
November 8
406 Malott

A Crash Course in Topological Groups

Beneath the smooth structure of a Lie group, or the normed linear structure of a Banach space, lies something more general, namely a topological group. In this talk, meant as merely a taste of the subject, we will define topological groups, give familiar examples, and lay out some of the basic facts about them, observing how the algebraic and topological properties influence one another. We will then survey some deeper results regarding certain classes of topological groups, such as locally compact, and Polish groups. Nothing beyond basic group theory, point-set topology, and a passing familiarity with the aforementioned examples, will be assumed.

Refreshments will be served at 4:00 pm in the math lounge.