

Seminar on Stacks and Groupoids

Introduction to Groupoids

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Although most of us have seen a definition of groupoid in this seminar and in the second deLong lecture this fall, I am going to start at the beginning. I intend to give examples of groupoids in terms of symmetries of plane geometry objects, as generalizations of permutation groups, in terms of group actions and equivalence relations, as tools for analysis, as tools for geometry, and as tools for topology. In the first talk a good many details will be omitted, but most of the ones that are important for the seminar are not very difficult to fill in. The reason for this brevity is in order to have more time for looking at groupoids as a way to parametrize spaces, in the second talk. There, I will discuss manifolds, orbifolds, foliations, and the tangent groupoid of a manifold.

Wednesday October 21st

4:00 p.m.

MATH 350