Higher Stacks and Local Homotopy Theory

Classically, the theory of stacks was motivated by the problem of classifying objects of a given kind up to isomorphism. A natural generalization is the theory of higher stacks, in which we study objects up to some weaker notion of equivalence (e.g. quasi-isomorphisms of chain complexes).

The purposes of this talk are to explain why a theory of higher stacks must involve 'higher structures', and also describe an approach to the subject based on the speaker’s thesis, which is titled 'Local Higher Category Theory'.