

Topology Seminar

Emily Riehl

of Harvard University will be speaking on

The Formal Category Theory of Quasi-Categories

on November 19 at 4:30 in
MIT Room 2-131

Quasi-categories (aka ∞ -categories) are convenient models of categories weakly enriched in spaces. Analogs of the standard categorical theorems involving limits and colimits, adjunctions, equivalences, monads and so forth have been proven by Joyal, Lurie and others. The goal of this talk is to describe a new ground-level approach that allows for 'formal' re-proofs of these facts that requires only very mild model category prerequisites and hence generalizes. A highlight will be the construction and characterization of the quasi-category of algebras associated to a homotopy coherent monad. This is a progress report on ongoing joint work with Dominic Verity.