1151-55-194 **Peter Haine*** (`phaine@mit.edu`). *On the homotopy theory of stratified spaces.*

A natural question arises when working with intersection cohomology and other stratified invariants of singular manifolds: what is the correct stable homotopy theory for these invariants to live in? But before answering that question, one first has to identify the correct *unstable* homotopy theory of stratified spaces. The exit-path category construction of MacPherson, Treumann, and Lurie provides functor from suitably nice stratified topological spaces to "abstract stratified homotopy types" — ∞-categories with a conservative functor to a poset. Work of Ayala–Francis–Rozenblyum even shows that their *conically smooth* stratified topological spaces embed into the ∞-category of abstract stratified homotopy types. We explain how to go further and produce an equivalence between the homotopy theory of all stratified topological spaces and these abstract stratified homotopy types. We discuss how this new viewpoint provides a space for stratified homotopy invariants in algebraic geometry as well, which was the topic of recent work with Barwick and Glasman. This is the first step of work in progress with Barwick on understanding stable stratified homotopy invariants. (Received August 18, 2019)