1146-51-389 **Logan McKee Higginbotham***, lhiggin3@vols.utk.edu. *Asymptotic Filtered Colimits and Coarse Embeddability into Separable Hilbert Spaces.* Preliminary report.

We begin with defining the asymptotic filtered colimit of a certain collection of large scale spaces. This construction may be intuitively thought of as a "large scale pasting lemma". We then investigate some coarse invariants that are preserved by the construction. In particular, the asymptotic filtered colimit of large scale spaces that coarsely embed into a separable Hilbert space (with additional conditions) coarsely embedds into a separable Hilbert space. We end the talk with discussion of some large scale properties that may or may not be preserved by the construction. (Received January 27, 2019)