Ik Jae Lee*, Department of Mathematics, Rowan University, 201 Mullica Hill Rd., Glassboro, NJ 08028, and David N Yetter. Stratified spaces, Directed Algebraic Topology, and State-Sum TQFTs. Preliminary report.

In this talk, we apply the theory of directed topology developed by Grandis to the study of strati ed spaces by describing several ways in which a strati cation or a strati cation with orientations on the strata can be used to produce a related directed space structure. This provides a setting for the constructions of state-sum TQFTs with defects, similar construction of a Dijkgraaf- Witten type TQFT. (Received September 17, 2019)