

1145-VU-2533      **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 stratified spaces by describing several ways in which a stratification or a stratification with orientations on the strata can be used to produce a related directed space structure. This description provides a setting for the constructions of state-sum TQFTs with defects, which we extend to a similar construction of a Dijkgraaf- Witten type TQFT in the case where the defects (lower dimensional strata) are not sources or targets, but sources on one side and targets on the other, according to an orientation convention. (Received September 25, 2018)