1107-57-134 Cody Armond and Adam M Lowrance* (adlowrance@vassar.edu). Turaev genus and alternating decompositions of link diagrams. Preliminary report.

We present an algorithm for computing the genus of the Turaev surface of a link diagram in terms of its decomposition into alternating regions. Consequently, we obtain a classification of Turaev genus one links. (Received January 10, 2015)