1131-51-420 **James H Staff*** (`james.staff@ttu.edu`), Lubbock, TX 79414. *Weyl quantization of Chern-Simons theory on a torus.* Preliminary report.

This talk concerns quantum Chern-Simons theory on a torus. For suitable choices of gauge group G, rigorous analytic models for the quantum theory are determined by Weyl quantization via geometric quantization of the moduli space of flat G-connections on the torus. In the case $G = SU(2)$, R. Gelca and A. Uribe showed that this quantum model is equivalent to the Reshetikhin-Turaev model arising from quantum groups. This Weyl quantization scheme is possible whenever G is compact and simply connected. I will describe this process with the case $G = SU(3)$ and discuss the resulting model. (Received July 18, 2017)