

1039-17-104

Peter Tingley* (pwtingle@math.berkeley.edu), 970 Evans hall #3840, Dept. of Mathematics, UC Berkeley, Berkeley, CA 94720-3840, and **Snyder Noah**. *The half twist in ribbon categories*.

Ribbon categories can be used to construct invariants of orientable framed links. In the standard approach to the subject, a 360-degree twist of the framing can be interpreted in the category but a 180-degree twist cannot. In this work we define a type of category where the 180-degree twist can be interpreted, and show that $U_q(\mathfrak{g})$ -representations have this structure. This has an advantage in that both the ribbon element (full twist) and the braiding can be constructed in terms of the half-twist, so there is one less elementary feature to consider. (Received March 08, 2008)