Nathan Druivenga* (nathan-druivenga@uiowa.edu), Department of Mathematics, University of Iowa, 14 MLH, Iowa City, IA 52242, and Charles Frohman and Sanjay Kumar. Tangle Functors at Roots of Unity.

We prove that there is a tangle functor underlying certain semicyclic representations of $U_q s l_2$ when $q = e^{i\pi/N}$ where N is odd. Specifically, when $U_q s l_2$ is presented in the standard way with generators E, F and K these representations have $E^N = a$, where a is a nonzero scalar, $F^N = 0$ and $K^N = 1$.

After proving the existence of the tangle functor we compare the answer to the colored Jones polynomial of level N-1 at $q=e^{i2\pi/N}$, for the figure eight knot. (Received August 28, 2015)