Meeting: 1000, Albuquerque, New Mexico, SS 14A, Special Session on Braids and Knots

1000-57-91 **Rollie Trapp*** (rtrapp@csusb.edu), Dept. of Math, 5500 University Pkwy, San Bernardino, CA 92407. *Polygonal Links and Crossing Number.* Preliminary report.

An algorithm is described for constructing knotted ribbons with polygonal boundaries. These constructions give improved upper bounds for the stick number of $T_{2,q}$ torus links. It is shown that minimal stick representatives of $T_{2,q}$ neccessarily writhe in the sense that they do not admit minimal crossing projections. The notion of minimal stick crossing number is defined, and the question of when minimal stick crossing number differs from the crossing number is discussed. Generalizations of the above construction yield the stick number for $T_{p,q}$ torus links for $2p < q \leq 3p$, extending Jin's results for the $p < q \leq 2p$ case. (Received August 18, 2004)