1054-54-156   **Logan Godkin*** (`lgod@student.ucr.edu`), University of California at Riverside, Mathematics Department, Surge 272, 900 University Avenue, Riverside, CA 92521, and **Mohamed Ait Nouh** (`maitnouh@math.ucr.edu`), University of California at Riverside, Mathematics Department, Surge 272, 900 University Avenue, Riverside, CA 92521. *Twisting of torus knots.* Preliminary report.

A twisted knot is a knot obtained from the *unknot* by locally twisting a handfull of strands (see Figure 1). More specifically, twisting can be defined in the Dehn surgery context, which reveals an important connection between twisting operations and 3- and 4-dimensional topology and geometry. Recall that a (p,q)-torus knot is a knot that wraps around the standard solid torus in the longitudinal direction p times and the meridional direction q times. Note that p and q are coprime (see Figure 2). A torus knot $T(p,q)$ $(0 < p < q)$ is *exceptional* if $q \equiv \pm 1$ (mod. p). In this talk, we will study Ait Nouh-Yasuhara old conjecture that states that all non-exceptional torus knots are non-twisted. In this talk, we prove that this conjecture holds for the infinite family of $(p, p+6)$-torus knots, for any $p \geq 5$. (Received September 12, 2009)

1