## Quasi-torus links and distance by zero-linking twists

Akio Kawauchi Osaka City University kawauchi@sci.osaka-cu.ac.jp

Given an oriented link L and a trivial knot k in the 3-sphere with the linking number Link(L, k) = 0, we can obtain a link L' from L by twisting L along k. The operation  $L \to L'$  is called a *zero-linking twist*. Any two oriented links with the same number of components are transformed each other by some number of zero-linking twists.

In this talk, we first review an algebraic estimation (given in Kobe J. Math. 13(1996),183-190) on the minimal number of zero-linking twists needed to transform between two given oriented links with the same number of components. By using this result, we estimate the distance between a quasi-torus link of type (p, q) introduced by V. O. Munturov and the torus link of type (p, q). This result will be included in a joint work with Yongju Bae and Seogman Seo.