ON STRONGLY n-TRIVIAL LINKS

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A k-component link L in S^3 is *strongly n-trivial* if there exist $n+1$ crossings contained in a diagram of L such that the result of any $0 < m \leq n+1$ crossing changes on these crossings is the k-component trivial link. By definition, strongly n-trivial link is automatically strongly $(n-1)$-trivial. For knot case (ie. $k = 1$), Howards–Luecke showed that the trivial knot is the only knot that is strongly n-trivial for all n. In fact, they proved that if K is non-trivial and strongly n-trivial, then n is less than $6g(K) - 3$, where $g(K)$ is the genus of K. Also recently the speaker proved that a non-trivial 2-bridge knot is strongly 1-trivial only if it is the trefoil knot or figure-eight knot.

In this talk, we will extend these results to link case.

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