1079-57-359 Susan Abernathy* (sabern1@tigers.lsu.edu). Obstructions to embedding torus tangles in links. Preliminary report.

A tangle T contained in the 3-ball embeds in a link L in S^3 if there is a 3-ball $B \subset S^3$ such that $B \cap L$ is the tangle T. More generally, one can extend the notion of tangle embedding to tangles contained in another submanifold of the 3-sphere, such as an unknotted solid torus. We refer to tangles inside an unknotted solid torus as *torus tangles*, and discuss some obstructions to embedding torus tangles in links. (Received January 17, 2012)