Topology Seminar

Brian Munson

of Wellesley College will be speaking on

A stable range description of the space of link maps

on February 9 at 4:30 in
MIT Room 2-131

For smooth manifolds P, Q, and N, let $\mathrm{Link}(P, Q; N)$ denote the space of smooth maps of P in N and Q in N such that their images are disjoint. I will discuss the connectivity of a "generalized linking number" from the homotopy fiber of the inclusion of $\mathrm{Link}(P, Q; N)$ into $\mathrm{Map}(P, N) \times \mathrm{Map}(Q, N)$ to a certain cobordism space of manifolds over a space which is a homotopy theoretic model for the intersections of P and Q. The proof of the connectivity uses some easy statements about connectivities in the world of smooth manifolds as a guide for obtaining similar estimates in a setting where the tools of differential topolgy do not apply. This is joint work with Tom Goodwillie.