

# Algebra/Topology Seminar

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## INTERSECTION PAIRINGS ON CONLEY INDICES PART 2

Thursday, April 4, 2013  
1:15 p.m. in ES-143

ABSTRACT. Having previously defined the Conley index of an isolated invariant set, I will give a brief outline of how to define intersection pairings on the tensor product of the homology modules of forward and reverse time Conley indices. A space of isolated invariant sets over the space of smooth vectorfields on a manifold will be defined and continuation isomorphisms between the Conley indices at the endpoints of a path of isolated invariant sets defined. Intersection pairings on Conley indices are invariant under such continuation isomorphisms. Applications to two-point boundary value problems will be discussed as time allows.