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**Peter Albers\*** (albers@cims.nyu.edu), 251 Mercer Street, New York, NY 10012. *On the topology of Lagrangian submanifolds.*

It is well-known that the existence of an embedding  $\iota : L \hookrightarrow M$  of a submanifold  $L$  into a symplectic manifold  $(M, \omega)$  as a *Lagrangian* submanifold imposes restrictions on the topology of  $L$ . So far the *intrinsic topology* of Lagrangian submanifolds has been studied quite extensively. We will present new results in this direction.

Furthermore, we investigate the *extrinsic topology* using Floer homological methods. For Hamiltonianly displaceable Lagrangian submanifolds this leads to a vanishing theorem for the homomorphism  $\iota_k : H_k(L) \rightarrow H_k(M)$  for certain degrees  $k$ . (Received September 20, 2005)