1046-19-1134   **Florentiu Daniel Cibotaru*** (`cibdan@yahoo.com`), 1512 D Rosemary Lane, South Bend, IN
46637. *Localization Formulae in odd K-theory.* Preliminary report.

The spectral flow of a 1-parameter (continuous) family of self-adjoint matrices counts with sign the number of 0-eigenvalues. When dealing with families of self-adjoint, elliptic operators, the collection of spectral flows naturally defines a 1-cohomology class in the parametrizing space, which is nothing else but the first component of the odd cohomology class of the index associated to the family. We use symplectic geometry techniques to build geometric representatives of the Poincare duals for these classes. We give a spectral interpretation of these classes in the spirit of the spectral flow. (Received September 14, 2008)