1125-58-1619 Lisa Jeffrey* (jeffrey@math.toronto.edu), Mathematics Dept., Univ. of Toronto, Toronto, ON M4T3B4, Canada. *Real loci in symplectic manifolds.*

Let M be a symplectic manifold and let σ be an antisymplectic involution on M. The real locus is the fixed point set of the involution. It is a Lagrangian submanifold. Suppose also M is equipped with the Hamiltonian action of a torus T. It is possible to define a compatibility between T and M. This set of ideas was introduced in a 1983 paper by Hans Duistermaat.

In this talk I will describe some developments in this field since Duistermaat's foundational paper. My contributions in this area are joint work with Liviu Mare, and (in a separate project) with Nan-Kuo Ho, Khoa Dang Nguyen and Eugene Xia. (Received September 18, 2016)