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**Timothy E Goldberg\*** (goldberg@math.cornell.edu), Department of Mathematics, Malott Hall, Cornell University, Ithaca, NY 14850. *A convexity theorem for the real part of a Borel invariant subvariety.*

Brion proved a convexity result for the moment map image of an irreducible subvariety of a compact integral Kaehler manifold preserved by the complexification of the Hamiltonian group action. Guillemin and Sjamaar generalized this result to irreducible subvarieties preserved only by a Borel subgroup. In another direction, O'Shea and Sjamaar proved a convexity result for the moment map image of the submanifold fixed by an antisymplectic involution. Analogous to Guillemin and Sjamaar's generalization of Brion's theorem, the speaker generalized O'Shea and Sjamaar's result, proving a convexity theorem for the moment map image of the involution fixed set of an irreducible subvariety preserved by a Borel subgroup. (Received September 14, 2008)