1035-22-867 Ralph Bremigan* (bremigan@bsu.edu), Department of Mathematical Sciences, Ball State University, Muncie, IN 47306-0490. Computation of gradient flows in flag manifolds.
On any flag manifold X of a complex semisimple group G, it is well-known that there exists a flow (with respect to the semisimple group G, it is well-known that there exists a flow (with respect to the semisimple group G) is the semisimple group G.

the gradient vector field of the squared norm of a moment map) that exhibits a bijection ("Matsuki duality") between the sets of orbits on X of two distinguished subgroups of G. We will discuss the degree to which this flow is explicitly computable. (Received September 17, 2007)