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Arlo Caine* (jacaine@cpp.edu) and **Berit Nilsen Givens** (bngivens@cpp.edu). *Classification of Toric Poisson structures*. Preliminary report.

We consider real Poisson structures on complex toric manifolds which are generically non-degenerate, invariant under the complex torus action, and of type (1,1). We show that such structures are in one-to-one correspondence with non-degenerate Hermitian quadratic forms on the dual of lie algebra of the torus. Furthermore, the complex torus action on the open symplectic leaf of such a Poisson manifold admits a complex torus-valued momentum map if and only if the corresponding form is integral with respect to the weight lattice of the torus. We will also discuss the Poisson cohomology of such structures on toric complex surfaces. (Received August 22, 2016)