SHENGDA HU, Université de Montréal, Département de Math. et de Stat., CP 6128, succ. Centre-Ville, Montreal, QC, H3C 3J7, Canada

T-duality with H-flux from generalized Kähler geometry

The construction of reduction by Poisson Lie group action in Poisson geometry can be extended to generalized complex geometry. A generalized Kähler manifold has two compatible generalized complex structures. We present a construction in generalized Kähler geometry via Poisson Lie reduction on either of the generalized complex structure. The two quotient manifolds thus obtained are possible candidates of a T-dual pair with H-flux.