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Construction of a Lie 2-algebra associated with a quasi-Hamiltonian G -space

Any 2-plectic manifold gives rise to a Lie 2-algebra, as established by Rogers. In contrast, a quasi-Hamiltonian G -space (M, ω, Φ) results in a closed relative differential form (ω, η) through the algebraic mapping cone.

This raises the question: Is there an analogous Lie 2-algebra associated with a quasi-Hamiltonian G -space? This talk will demonstrate that a similar construction to Rogers' theorem can be applied in the relative context. Specifically, we will show that a quasi-Hamiltonian G -space can give rise to a Lie 2-algebra.