Several incarnations of the Hamiltonian group

The group of Hamiltonian diffeomorphisms of a symplectic manifold is the kernel of a flux homomorphism. Analogous objects appear in several other settings, either geometric: locally conformally symplectic manifold, Poisson manifold, foliated manifold, symplectic groupoid and presymplectic 2-form (invariant and equivariant setting), or algebraic: Lie algebra 2-cocycle. Central or abelian extensions of the Hamiltonian group, similar to the central extension provided by the Kostant-Souriau geometric prequantization, can also be found.