MICHAEL LAU, University of Windsor Representations of Multiloop Algebras

Given any complex Lie algebra L, the current algebra $\mathrm{Map}(T,L)$ of L-valued regular functions on the n-torus T is a Lie algebra with pointwise Lie bracket. When T and L admit the action of a discrete group G, the G-equivariant functions in $\mathrm{Map}(T,L)$ form a Lie subalgebra. We will discuss some examples of such algebras and their representations.