
LUCAS CALIXTO, University of Ottawa (Canada) and Unicamp (Brazil)

Equivariant Map Queer Lie Superalgebras

Map Lie (super)algebras are a large class of Lie (super)algebras that generalize the well-known loop and current Lie (super)algebras. More precisely, the map Lie superalgebra $M(X, \mathfrak{g})$ is the Lie superalgebra whose elements are regular maps from the algebraic variety X to the Lie superalgebra \mathfrak{g} . More generally, if Γ is a group acting on both X and \mathfrak{g} , then the *equivariant* map Lie superalgebra $M(X, \mathfrak{g})^\Gamma$ consists of the elements of $M(X, \mathfrak{g})$ that are Γ -equivariant. Our goal in this talk is to present a classification of all irreducible finite-dimensional representations of $M(X, \mathfrak{g})^\Gamma$ in the case that \mathfrak{g} is the queer Lie superalgebra. In particular, this yields a classification of the irreducible finite-dimensional modules for twisted loop queer superalgebras. This is joint work with Adriano Moura and Alistair Savage.

The author is supported by FAPESP grant 2013/25842-4