

1086-17-1168

Nathanael J Manning*, 585 King Edward Ave, Ottawa, Ontario K1N6Y7, Canada, and
Ghislain Fourier and **Alistair Savage**. *Global Weyl modules for equivariant map algebras.*

A family of infinite-dimensional modules called global Weyl modules were defined and studied by Chari and Pressley over loop algebras $\mathfrak{g} \otimes \mathbf{C}[t, t^{-1}]$, where \mathfrak{g} is a simple complex finite-dimensional Lie algebra. Feigin and Loktev extended the definition to algebras of the form $\mathfrak{g} \otimes A$, where A is the coordinate ring of an affine variety. In collaboration with Fourier and Senesi, global Weyl modules were defined and studied for the first time for loop algebras which have been twisted by a graph automorphism of the Dynkin diagram. This talk, which presents joint work with Fourier and Savage, focuses on the generalization of these modules to the setting of equivariant map algebras: the fixed points $(\mathfrak{g} \otimes A)^\Gamma$, where Γ is a finite group acting on \mathfrak{g} and A by automorphisms. (Received September 19, 2012)