QCHARACTERS AND TENSOR PRODUCTS OF KIRILLOV-RESHETIHIN MODULES

FERNANDA DE ANDRADE PEREIRA
ITA

Abstract: We present a discussion about qcharacters of some special classes of finite-dimensional representations of quantum affine algebras and how to use this tool for obtaining informations about tensor products. In particular, for a quantum affine algebra of type D, we study the tensor product of two Kirillov-Rehetihin modules associated to spin nodes. We give a precise characterization for when such tensor product is irreducible and give some extra informations in the reducible case.