

q -quantum vertex algebras and their ϕ -coordinated modules

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Abstract

We shall talk on a notion of q -quantum vertex algebra and a notion of ϕ -coordinated module for a q -quantum vertex algebra. Using these notions we unify E. Frenkel and N. Reshetikhin's theory of deformed chiral algebras and P. Etingof and D. Kazhdan's theory of quantum vertex operator algebras. We give an explicit example of q -quantum vertex algebras by using a certain q -deformed $\beta\gamma$ system.