A newly shifted quantum toroidal gl(2)

Evgeny Mukhin

Indiana University Indianapolis

We give a realization of quantum toroidal gl(2) which we view as an affine analog of the new Drinfeld realization of quantum affine gl(2). That allows us to define a version of a shifted quantum toroidal gl(2). We discuss various motivations for this definition, representations of the shifted algebra, and generalizations. This is a joint work with B. Feigin and M. Jimbo.