A Drinfeld presentation of twisted Yangians

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1. Abstract

We will describe a Drinfeld type current presentation for Olshanski's twisted Yangians of type AI (associated with orthogonal Lie algebras), settling a longstanding problem. This presentation arises from two distinct approaches compatibly: Gauss decomposition and degeneration of affine i-quantum groups; our talk will focus on the Gauss decomposition approach. This is a joint work with Kang Lu and Weinan Zhang. Time permitting, we will discuss about generalizations of current presentations for a large class of twisted Yangians from the viewpoint of Satake diagrams and potential applications to finite W-algebras of classical type.