

Drinfeld categories and Gelfand-Tsetlin modules

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Abstract

We will discuss the theory of Gelfand-Tsetlin modules for the Lie algebra $\mathfrak{gl}(n)$, which form an important class of representations. Explicit construction of such modules is a very difficult problem which is still open at large. We will discuss recent breakthrough results obtained in this direction. In particular, we will focus on the classification of tame Gelfand-Tsetlin modules and related representations of the so-called Drinfeld categories.