

Center for Elliptic Quantum Group  $E_{\tau, \eta}(sl_n)$

ZHAO Shao-You,<sup>1</sup> SHI Kang-Jie,<sup>2</sup> and YUE Rui-Hong<sup>2</sup>

<sup>1</sup> Department of Physics, Beijing Institute of Technology, Beijing 100081, China

<sup>2</sup> Institute of Modern Physics, Northwest University, Xi'an 710069, China

(Received: 2002-3-13; Revised: 2002-6-10)

Abstract: We give the center of the elliptic quantum group in general cases. Based on the dynamical Yang-Baxter relation and the fusion method, we prove that the center commutes with all generators of the elliptic quantum group. Then for a kind of assumed form of these generators, we find that the coefficients of these generators form a new type of closed algebra. We also give the center for the algebra.

PACS: 12.40.Ee, 02.20.Uw, 02.30.Ik

Key words: center, elliptic quantum group, dynamical Yang-Baxter relation

[\[Full text: PDF\]](#)

Close