Nobuhiro Asai* (nasai@auecc.aichi-edu.ac.jp), Department of Mathematics, Aichi University of Education, 1 Hirosawa, Igaya, Kariya, Aichi 448-8542, Japan. Probability distributions of a field operator associated with a $q$-deformed algebra. Preliminary report.

The main purpose of this talk is to show that the $q$-field operator of Meixner type on $q$-Fock space in the sense of H. Yoshida (JPA 2011) can be realized on the $(\alpha,q)$-Fock space in the sense of Bożejko-Ejsmont-Hasebe (JFA, 2015) in terms of $(\alpha,q)$-operators if a special choice $\alpha = -q$ is considered. (Received September 14, 2018)