Meeting: 1001, Evanston, Illinois, SS 24A, Special Session on Hopf Algebras at the Crossroads of Algebra, Category Theory, and Topology

Hua Bai* (huabai@usc.edu), Department of Mathematics, University of Southern California, 3620 South Vermont Avenue, KAP 108, Los Angeles, CA 90089-2532. A uniqueness property for quantizations of Teichmüller spaces. Preliminary report.

We consider the quantization of the Teichmüller space of a surface developed by Chekhov, Fock and Kashaev. A key ingredient of their construction is a certain solution to the pentagon equation. We show that this quantization is the unique one which satisfies a certain number of natural conditions. (Received August 25, 2004)