1046-81-556Christopher Scott Hiatt\* (hiatt\_c@utpb.edu), 2910 W Michigan Ave #204, Midland, TX<br/>79701. Quantum Traces In Quantum Teichmüller Theory. Preliminary report.

We prove that for the torus with one hole and  $p \ge 1$  punctures and the sphere with four holes there is a family of quantum trace functions in the quantum Teichmüller space satisfying the properties proposed by Chekhov and Fock in *Observables in 3D Gravity and Geodesic Algebras*, from: "Quantum groups and integrable systems (Prague, 2000)", Czechoslovak J. Phys. 50 (2000) 1201-1208 MR1806262. (Received September 08, 2008)