1122-14-50   **Alisa Knizel*** (`alisik@mit.edu`). *Moduli spaces of q-connections and gap probabilities.*
We will talk about a generalized q-analogue of methods introduced by Arinkin and Borodin. In particular we will explain how the one-interval gap probability for the q-Hahn orthogonal polynomial ensemble can be expressed through a solution of the asymmetric q-Painlevé V equation, which requires a new derivation of a q-difference equation of Sakai's hierarchy of type $A_2^{(1)}$. (Received August 02, 2016)