About modeling of Markov processes with asymptotically central measure on three dimensional Young diagrams

N.N. Vasilyev (PDMI RAS, St.Petersburg) A.B. Terentiev (Spb.STU, St. Petersburg) *E-mail address:* vasiliev@pdmi.ras.ru, alterterrific@gmail.com

The talk is devoted to computer modeling of Markov random walks on the three dimensional Young graph. The vertices of this graph are corresponded to the three dimensional Young diagrams and paths from the root vertex corresponds to the three dimensional Young tableaux. In three dimensional case there are a lot of open questions about such kind of processes with central measure which give us the same probability for all paths to the same diagram. For example it is not known any natural generalization of Plancherel measure, which plays a great role in the representation theory of infinite symmetric group. We use an interpretation of Young tableaux as finite monomial orderings and transition probabilities of the process as discrete probability distributions on the generators of all zero dimensional monomial ideals of three variables. It allows us to use the Robbiano parametrization of admissible monomial orderings to study deviation of transition probabilities along different paths connected the same pair of diagrams.