

1119-60-215

Konstantin Matveev* (kosmatveev@gmail.com) and **Leonid Petrov**
(lenia.petrov@gmail.com). *Random polymers and q -deformed RSK algorithms.*

Some "integrable" or "exactly solvable" probabilistic models are amenable to analysis, because the underlying algebraic structure allows to express certain correlations and moments via exact formulas. We will see how this "integrability" manifests itself in particular models of random polymers (of log-Gamma and strict weak type) and interacting particle systems (of q -TASEP and q -PushTASEP type), and how q -deformed Robinson-Schensted-Knuth algorithms arise as unifying constructions. (Received February 15, 2016)