Dobrushin Scholarship report (2017)

Yaroslav Naprienko

Academic achievements:
- studying at HSE Faculty of mathematics with all excellent marks.
- Increased scholarship for academic success in HSE Faculty of mathematics

List of seminars:
- Dynamical Systems and Ergodic Theory (A. Skripchenko, A. Zorich), "*On Simplicity of Lyapunov Spectrum*"
- Dynamical Systems (Y. Ilyashenko), "*On Zeros of Entire Functions*"
- Seminar on Complex Analysis (Gonchar Seminar), *"On the location of zeros of entire functions"*

List of conferences:
- (planning) Санкт-Петербургская зимняя молодежная конференция по теории вероятностей и математической физики (19-21 декабря), *"Rate of Convergence to Semi-Circular Law for Random Matrix Ensembles"*
- Function theory and dynamics of point processes (St. Petersburg, 1-3 June), *"The moment generating functions of Gaussian Ensembles"*
- 55-th international students scientific conference (Novosibirsk, Russia), *"On number of zeros of entire functions"*

List of research papers:
- (prepared) *"On densities of Gaussian Ensembles"*
  Annotation: we derive differential equations on densities of Gaussian Ensembles: Unitary, Symplectic and Orthogonal; using these equations, we give the 1/n asymptotic expansion for these ensembles. Also, using O. Kopelevitch's result we derive a ceonvergent asymptotic expansion for certain entire functions. We also calculate the explicit expressions for the Laplace transform of the densities in GSE and GOE cases and, therefore, answer on a posed question of U. Haagerup, S. Thorbjørnsen и M. Ledoux.

Teaching assistance:
- The Summer School "Contemporary Mathematics" (Dubna, Russia)
- Calculus 1, Faculty of mathematics HSE
- Calculus 1, Independent University of Moscow