Penn/Temple Probability Seminar

The entropy of Schur-Weyl measures

Sevak Mkrtchyan (Rochester)

Tuesday, December 1, 2015 2:30-3:30pm, DLR 3C8 (Penn)

We will study local and global statistical properties of Young diagrams with respect to a Plancherel-type family of measures called Schur-Weyl measures and use the results to answer a question from asymptotic representation theory. More precisely, we will solve a variational problem to prove a limit-shape result for random Young diagrams with respect to the Schur-Weyl measures and apply the results to obtain logarithmic, order-sharp bounds for the dimensions of certain representations of finite symmetric groups.