ACM 217 - Topics in random matrix theory
Staff (Ke Wang)
M/W
1:00 pm to 2:25 pm
ANB 314

Summary: This course aims to give an introduction to random matrix theory. We will cover various random matrix models such as Wigner matrices, sample covariance matrices and non-Hermitian matrices. We will investigate the global and local spectral statistics of random matrices when their dimensions tend to infinity. The general methodologies (e.g., moment method, Stieltjes transform method, free probability, etc) used to study random matrices will be discussed. The students are assumed to be familiar with the basics of probability theory and linear algebra.