

<<大维随机矩阵的谱分析>>

图书基本信息

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作者：Zhidong Bai Jack W.Silverstein

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内容概要

《大维随机矩阵的谱分析(英文版)》:The aim of the book is to introduce basic concepts, main results, and widely applied mathematical tools in the spectral analysis of large dimensional random matrices. In it we will introduce many of the fundamental results, such as the semicircular law of Wigner matrices, the Marchenko-Pastur law, the limiting spectral distribution of the multivariate F matrix, limits of extremal eigenvalues, spectrum separation theorems, convergence rates of empirical spectral distributions, central limit theorems of linear spectral statistics and the partial solution of the famous circular law. While deriving the main results, the book will simultaneously emphasize the ideas and methodologies of the fundamental mathematical tools, among them being: truncation techniques, matrix transformations, moment convergence theorems, and the Stieltjes transform. Thus, its treatment is especially fitting to the needs of mathematics and statistic graduate students, and beginning researchers, who can learn the basic methodologies and ideas to solve problems in this area.

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