

Preface to the Second Edition

The ongoing developments being made in large dimensional data analysis continue to generate great interest in random matrix theory in both theoretical investigations and applications in many disciplines. This has doubtlessly contributed to the significant demand for this monograph, resulting in its first printing being sold out. The authors have received many requests to publish a second edition of the book.

Since the publication of the first edition in 2006, many new results have been reported in the literature. However, due to limitations in space, we cannot include all new achievements in the second edition. In accordance with the needs of statistics and signal processing, we have added a new chapter on the limiting behavior of eigenvectors of large dimensional sample covariance matrices. To illustrate the application of RMT to wireless communications and statistical finance, we have added a chapter on these areas. Certain new developments are commented on throughout the book. Some typos and errors found in the first edition have been corrected.

The authors would like to express their appreciation to Ms. Lü Hong for her help in the preparation of the second edition. They would also like to thank Professors Ying-Chang Liang, Zhaoben Fang, Baoxue Zhang, and Shurong Zheng, and Mr. Jiang Hu, for their valuable comments and suggestions. They also thank the copy editor, Mr. Hal Heinglein, for his careful reading, corrections, and helpful suggestions. The first author would like to acknowledge the support from grants NSFC 10871036, NUS R-155-000-079-112, and R-155-000-096-720.

Changchun, China, and Singapore
Cary, North Carolina, USA

Zhidong Bai
Jack W. Silverstein
March 2009



<http://www.springer.com/978-1-4419-0660-1>

Spectral Analysis of Large Dimensional Random
Matrices

Bai, Z.; Silverstein, J.W.

2010, XVI, 552 p., Hardcover

ISBN: 978-1-4419-0660-1