
Preface

As a consequence of certain independent developments in mathematics in recent years, a wide variety of problems in combinatorics, some of long standing, can now be solved in terms of random matrix theory (RMT). The goal of this book is to describe in detail these developments and some of their applications to problems in combinatorics. The book is based on courses on two key examples from combinatorial theory, viz., Ulam's increasing subsequence problem, and the Aztec diamond. These courses were given at the Courant Institute and the University of Michigan by two of the authors (P.D. and J.B., respectively) some ten years ago.

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