



## Persi Diaconis

Mary V. Sunseri Professor in the School of Humanities and Sciences and  
Professor of Mathematics

Statistics

 Curriculum Vitae available Online

---

### Bio

#### BIO

I am a mathematician and statistician working in probability, combinatorics, and group theory with a focus on applications to statistics and scientific computing. A specialty is rates of convergence of Markov chains. I am currently interested in trying to adapt the many mathematical developments to say something useful to practitioners in large real-world simulations.

#### ACADEMIC APPOINTMENTS

- Professor, Statistics
- Professor, Mathematics

#### ADMINISTRATIVE APPOINTMENTS

- Visiting Professor, Université de Nice-Sophia Antipolis, (2006-2007)
- Fellow, Center for Advanced Study in the Behavioral Sciences, (1999-2000)
- Mary Sunseri Professor, Department of Statistics, Stanford University, (1998- present)
- Professor of Mathematics, Stanford University, (1998- present)
- David Duncan Professor, Department of Mathematics and ORIE, Cornell University, (1996-1998)
- George Vasmer Leverett Professor of Mathematics, Harvard University, (1987-1997)
- Visiting Professor, Department of Mathematics, Harvard University, (1985-1986)
- Visiting Professor, Department of Mathematics, Massachusetts Institute of Technology, (1985-1986)
- Professor of Statistics, Stanford University, (1981-1987)
- Visiting Professor, Department of Statistics, Harvard University, (1981-1982)
- Associate Professor of Statistics, Stanford University, (1979-1980)
- Research Staff Member, AT&T Bell Laboratories, (1978-1979)
- Assistant Professor of Statistics, Stanford University, (1974-1979)

#### PROGRAM AFFILIATIONS

- Symbolic Systems Program

#### LINKS

- Statistics Department Faculty Page: <https://statistics.stanford.edu/people/persi-diaconis>
- Mathematics Department Faculty Page: <https://mathematics.stanford.edu/people/persi-diaconis>

## Research & Scholarship

---

### CURRENT RESEARCH AND SCHOLARLY INTERESTS

Many of my publications during the past three years have focused on rates of convergence of Markov chains to their stationary distributions. This is an important part of applied probability and scientific computing. I am particularly pleased by (a) results with Phillip Wood showing that most birth and death chains on  $\{0, 1, \dots\}$  do not show a sharp cut-off; (b) results with Jason Fulman and Susan Holmes giving a careful analysis of casino shuffling machines; (c) results with Sourav Chatterjee making new contributions to a practical physics problem, Bose-Einstein condensation.

I think I opened up two new areas in the study of Markov chains: rates of convergence to quasi-stationarity and the study of "features". For the first, a host of absorbing Markov chains appear in genetics, biology, and queuing. These have quasi-stationary distributions: given that the chain has not been absorbed by time  $T$ , where is it likely to be? We ask about quantitative versions, how large does  $T$  have to be to make the asymptotics useful? The many tools available for ergodic chains need to be completely revised. These papers make a start at revising the geometric theory (Poincare, Cheeger, Nash, log Sobolev). For the second area, "features", often researchers don't care about all aspects of a chain, but are only interested in a few features; then the rates of convergence can change. I proved such things for riffle shuffling but now see how to do things for other chains.

In addition to my work on Markov chains, I have completed a number of statistical projects. One of the main ones is for the statistical analysis of graph and network data. Working with Sourav Chatterjee, Svante Janson, and Susan Holmes we built a theory to allow analysis of familiar exponential models. These can have surprising properties: sometimes  $N$  parameters can be accurately estimated based on a sample of size one and sometimes a large amount of data can still lead to inconsistent estimators. This work opened up the connection between statistics and the emerging area of graph limit theory. In turn, that connection has led to a torrent of follow-up work, conferences, and a slew of real-world applications.

One key topic in my work has been generalizations of de Finetti's notion of exchangeability. The graph work above leans on the connections I made between graph limit theory and the Aldous-Hoover theorem. In a different direction, working with Sergio Bacallado and Susan Holmes, I managed to develop a practical theory of "almost exchangeability" and apply it to some biological problems. I am busy following this up with some more theoretical work on de Finetti-style representation theorems for approximate exchangeable data.

A very different statistical development is represented by my work with Bob Griffiths developing bivariate distributions for data with binomial or multinomial models, and with Bailey, et al. which combines my group-theoretic methods for analysis of designed experiments with more classical approaches of Bailey and Nelder's "general balance". It is surprising that these important problems haven't been seriously treated to date. Finally, work with my students Bhaswar Bhattacharya and Sumit Mukherjee on generalizations of the birthday problem to random graphs has direct application to Friedman-Rafsky two-sample tests.

## Teaching

---

### COURSES

#### 2025-26

- Introduction to Combinatorics and Its Applications: MATH 108 (Spr)
- Modern Markov Chains: MATH 235, STATS 318 (Spr)
- Theory of Probability II: MATH 230B, STATS 310B (Win)

#### 2024-25

- Introduction to Combinatorics and Its Applications: MATH 108 (Spr)

- Theory of Probability I: MATH 230A, STATS 310A (Aut)
- Topics in Combinatorics: MATH 233C (Spr)

#### 2023-24

- Functions of a Complex Variable: MATH 106 (Win)
- Modern Markov Chains: MATH 235, STATS 318 (Win)
- Theory of Probability I: MATH 230A, STATS 310A (Aut)

## STANFORD ADVISEES

### Doctoral Dissertation Reader (AC)

Rahul Raphael Kanekar

### Doctoral Dissertation Advisor (AC)

Michael Howes, Zhiqi Li, Andrew Lin, Nathan Tung

## Publications

---

### PUBLICATIONS

- **An algorithm for uniform generation of unlabeled (Pólya) trees** *FORUM OF MATHEMATICS SIGMA*  
Bartholdi, L., Diaconis, P.  
2026; 14
- **On the number and sizes of double cosets of Sylow subgroups of the symmetric group** *JOURNAL OF ALGEBRA*  
Diaconis, P., Giannelli, E., Guralnick, R. M., Law, S., Navarro, G., Sambale, B., Spink, H.  
2026; 689: 62-86
- **Random sampling of contingency tables and partitions: Two practical examples of the Burnside process** *STATISTICS AND COMPUTING*  
Diaconis, P., Howes, M.  
2025; 35 (6)
- **Counting the number of group orbits by marrying the Burnside process with importance sampling** *ADVANCES IN APPLIED MATHEMATICS*  
Diaconis, P., Zhong, C.  
2026; 172
- **Probabilizing semigroups???** *SEMIGROUP FORUM*  
Diaconis, P.  
2025
- **Poisson approximation for large permutation groups** *ADVANCES IN APPLIED MATHEMATICS*  
Diaconis, P., Tung, N.  
2025; 167
- **Enumerative theory for the Tsetlin library** *JOURNAL OF ALGEBRA*  
Chatterjee, S., Diaconis, P., Kim, G. B.  
2024; 655: 139-162
- **Isomorphisms between random graphs** *JOURNAL OF COMBINATORIAL THEORY SERIES B*  
Chatterjee, S., Diaconis, P.  
2023; 160: 144-162
- **SEQUENTIAL IMPORTANCE SAMPLING FOR ESTIMATING EXPECTATIONS OVER THE SPACE OF PERFECT MATCHINGS** *ANNALS OF APPLIED PROBABILITY*  
Alimohammadi, Y., Diaconis, P., Roghani, M., Saberi, A.  
2023; 33 (2): 799-833

- **In Praise (and Search) of J. V. Uspensky** *ENERGY AND BUILDINGS*  
Diaconis, P., Zabell, S.  
2023; 282: 160-183
- **Double coset Markov chains** *FORUM OF MATHEMATICS SIGMA*  
Diaconis, P., Ram, A., Simper, M.  
2023; 11
- **Approximate exchangeability and de Finetti priors in 2022** *SCANDINAVIAN JOURNAL OF STATISTICS*  
Diaconis, P.  
2022
- **Shuffling cards by spatial motion** *STOCHASTIC PROCESSES AND THEIR APPLICATIONS*  
Diaconis, P., Pal, S.  
2022; 152: 149-176
- **Statistical enumeration of groups by double cosets** *JOURNAL OF ALGEBRA*  
Diaconis, P., Simper, M.  
2022; 607: 214-246
- **Gambler's Ruin and the ICM** *STATISTICAL SCIENCE*  
Diaconis, P., Ethier, S. N.  
2022; 37 (3): 289-305
- **Guessing about Guessing: Practical Strategies for Card Guessing with Feedback** *AMERICAN MATHEMATICAL MONTHLY*  
Diaconis, P., Graham, R., Spiro, S.  
2022
- **Partial Exchangeability for Contingency Tables** *MATHEMATICS*  
Diaconis, P.  
2022; 10 (3)
- **A PHASE TRANSITION FOR REPEATED AVERAGES** *ANNALS OF PROBABILITY*  
Chatterjee, S., Diaconis, P., Sly, A., Zhang, L.  
2022; 50 (1): 1-17
- **Card guessing with partial feedback** *COMBINATORICS PROBABILITY & COMPUTING*  
Diaconis, P., Graham, R., He, X., Spiro, S.  
2022; 31 (1): 1-20
- **Randomized sequential importance sampling for estimating the number of perfect matchings in bipartite graphs** *ADVANCES IN APPLIED MATHEMATICS*  
Diaconis, P., Kolesnik, B.  
2021; 131
- **Hahn polynomials and the Burnside process** *RAMANUJAN JOURNAL*  
Diaconis, P., Zhong, C.  
2021
- **Speeding up Markov chains with deterministic jumps (vol 178, pg 1193, 2020)** *PROBABILITY THEORY AND RELATED FIELDS*  
Chatterjee, S., Diaconis, P.  
2021
- **Discussion of "A Gibbs Sampler for a Class of Random Convex Polytopes"** *JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATION*  
Diaconis, P., Wang, G.  
2021; 116 (535): 1193-1195
- **The-Square-and-Add Markov Chain** *MATHEMATICAL INTELLIGENCER*  
Diaconis, P., He, J., Martin Isaacs, I.  
2021

- **Permanental generating functions and sequential importance sampling** *ADVANCES IN APPLIED MATHEMATICS*  
Chung, F., Diaconis, P., Graham, R.  
2021; 126
- **RANDOM WALK ON UNIPOTENT MATRIX GROUPS** *ANNALES SCIENTIFIQUES DE L'ECOLE NORMALE SUPERIEURE*  
Diaconis, P., Hough, R.  
2021; 54 (3): 587-625
- **GAMBLER'S RUIN ESTIMATES ON FINITE INNER UNIFORM DOMAINS** *ANNALS OF APPLIED PROBABILITY*  
Diaconis, P., Houston-Edwards, K., Saloff-Coste, L.  
2021; 31 (2): 865-895
- **Tensor product Markov chains** *JOURNAL OF ALGEBRA*  
Benkart, G., Diaconis, P., Liebeck, M. W., Pham Huu Tiep  
2020; 561: 17–83
- **Speeding up Markov chains with deterministic jumps** *PROBABILITY THEORY AND RELATED FIELDS*  
Chatterjee, S., Diaconis, P.  
2020
- **Analytic-geometric methods for finite Markov chains with applications to quasi-stationarity** *ALEA-LATIN AMERICAN JOURNAL OF PROBABILITY AND MATHEMATICAL STATISTICS*  
Diaconis, P., Houston-Edwards, K., Saloff-Coste, L.  
2020; 17 (2): 901–91
- **Reproducing kernel orthogonal polynomials on the multinomial distribution** *JOURNAL OF APPROXIMATION THEORY*  
Diaconis, P., Griffiths, R. C.  
2019; 242: 1–30
- **THE SAMPLE SIZE REQUIRED IN IMPORTANCE SAMPLING** *ANNALS OF APPLIED PROBABILITY*  
Chatterjee, S., Diaconis, P.  
2018; 28 (2): 1099–1135
- **Bayesian goodness of fit tests: a conversation for David Mumford** *ANNALS OF MATHEMATICAL SCIENCES AND APPLICATIONS*  
Diaconis, P., Wang, G.  
2018; 3 (1): 287–308
- **A CENTRAL LIMIT THEOREM FOR A NEW STATISTIC ON PERMUTATIONS** *INDIAN JOURNAL OF PURE & APPLIED MATHEMATICS*  
Chatterjee, S., Diaconis, P.  
2017; 48 (4): 561–73
- **UNIVERSAL LIMIT THEOREMS IN GRAPH COLORING PROBLEMS WITH CONNECTIONS TO EXTREMAL COMBINATORICS** *ANNALS OF APPLIED PROBABILITY*  
Bhattacharya, B. B., Diaconis, P., Mukherjeet, S.  
2017; 27 (1): 337-394
- **Useful Bounds on the Extreme Eigenvalues and Vectors of Matrices for Harper's Operators** *LARGE TRUNCATED TOEPLITZ MATRICES, TOEPLITZ OPERATORS, AND RELATED TOPICS: THE ALBRECHT BOTTCHEM ANNIVERSARY VOLUME*  
Bump, D., Diaconis, P., Hicks, A., Miclo, L., Widom, H.  
edited by Bini, D. A., Ehrhardt, T., Karlovich, A. Y., Spitkovsky  
2017; 259: 235–65
- **The Mathematics of the Flip and Horseshoe Shuffles** *AMERICAN MATHEMATICAL MONTHLY*  
Butler, S., Diaconis, P., Graham, R.  
2016; 123 (6): 542-556
- **Estimates on the amplitude of the first Dirichlet eigenvector in discrete frameworks** *SCIENCE CHINA-MATHEMATICS*  
Diaconis, P., Miclo, L.  
2016; 59 (2): 205-226

- **Central limit theorems for some set partition statistics** *ADVANCES IN APPLIED MATHEMATICS*  
Chern, B., Diaconis, P., Kane, D. M., Rhoades, R. C.  
2015; 70: 92-105
- **de Finetti Priors using Markov chain Monte Carlo computations** *STATISTICS AND COMPUTING*  
Bacallado, S., Diaconis, P., Holmes, S.  
2015; 25 (4): 797-808
- **de Finetti Priors using Markov chain Monte Carlo computations.** *Statistics and computing*  
Bacallado, S., Diaconis, P., Holmes, S.  
2015; 25 (4): 797-808
- **An introduction to multivariate Krawtchouk polynomials and their applications** *JOURNAL OF STATISTICAL PLANNING AND INFERENCE*  
Diaconis, P., Griffiths, R.  
2014; 154: 39-53
- **Carries, Group Theory, and Additive Combinatorics** *AMERICAN MATHEMATICAL MONTHLY*  
Diaconis, P., Shao, X., Soundararajan, K.  
2014; 121 (8): 674-688
- **Unseparated pairs and fixed points in random permutations** *ADVANCES IN APPLIED MATHEMATICS*  
Diaconis, P., Evans, S. N., Graham, R.  
2014; 61: 102-124
- **Combinatorics of balanced carries** *ADVANCES IN APPLIED MATHEMATICS*  
Diaconis, P., Fulman, J.  
2014; 59: 8-25
- **Convolution powers of complex functions on  $\mathbb{Z}$**  *MATHEMATISCHE NACHRICHTEN*  
Diaconis, P., Saloff-Coste, L.  
2014; 287 (10): 1106-1130
- **Hopf algebras and Markov chains: two examples and a theory** *JOURNAL OF ALGEBRAIC COMBINATORICS*  
Diaconis, P., Pang, C. Y., Ram, A.  
2014; 39 (3): 527-585
- **Fluctuations of the Bose-Einstein condensate** *JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL*  
Chatterjee, S., Diaconis, P.  
2014; 47 (8)
- **An Introduction to Multivariate Krawtchouk Polynomials and their Applications** *Journal of Statistical Planning and Inference*  
Diaconis, P., Griffiths, R.  
2014
- **ESTIMATING AND UNDERSTANDING EXPONENTIAL RANDOM GRAPH MODELS** *ANNALS OF STATISTICS*  
Chatterjee, S., Diaconis, P.  
2013; 41 (5): 2428-2461
- **Some things we've learned (about Markov chain Monte Carlo)** *BERNOULLI*  
Diaconis, P.  
2013; 19 (4): 1294-1305
- **ANALYSIS OF CASINO SHELF SHUFFLING MACHINES** *ANNALS OF APPLIED PROBABILITY*  
Diaconis, P., Fulman, J., Holmes, S.  
2013; 23 (4): 1692-1720
- **Random doubly stochastic tridiagonal matrices** *RANDOM STRUCTURES & ALGORITHMS*  
Diaconis, P., Wood, P. M.  
2013; 42 (4): 403-437

- **Note on a partition limit theorem for rank and crank** *BULLETIN OF THE LONDON MATHEMATICAL SOCIETY*  
Diaconis, P., Janson, S., Rhoades, R. C.  
2013; 45: 551-553
- **Interval Graph Limits** *ANNALS OF COMBINATORICS*  
Diaconis, P., Holmes, S., Janson, S.  
2013; 17 (1): 27-52
- **Interval Graph Limits.** *Annals of combinatorics*  
Diaconis, P., Holmes, S., Janson, S.  
2013; 17 (1): 27-52
- **Sampling from a Manifold** *Advances in Modern Statistical Theory and Applications: A Festschrift in honor of Morris L. Eaton*  
Diaconis, P., Holmes, S., Shahashahani, M.  
edited by Jones, G., Shen, X.  
Institute of Mathematical Statistics.2013: 102–125
- **Closed Expressions for Averages of Set Partition Statistics** *International Journal of Modern Math*  
Chern, B., Diaconis, P., Chatterjee, S.  
2013
- **Carries, Group Theory and Additive Combinatorics** *American Mathematical Monthly*  
Diaconis, P., Shao, X., Soundararajan, K.  
2013
- **Fluctuations of the Bose-Einstein Condensate** *Journal of Physics A: Mathematical and Theoretical*  
Chatterjee, S., Diaconis, P.  
2013; 47 (8)
- **Foulkes characters, Eulerian idempotents, and an amazing matrix** *JOURNAL OF ALGEBRAIC COMBINATORICS*  
Diaconis, P., Fulman, J.  
2012; 36 (3): 425-440
- **Gibbs/Metropolis algorithms on a convex polytope** *MATHEMATISCHE ZEITSCHRIFT*  
Diaconis, P., Lebeau, G., Michel, L.  
2012; 272 (1-2): 109-129
- **A PROBABILISTIC INTERPRETATION OF THE MACDONALD POLYNOMIALS** *ANNALS OF PROBABILITY*  
Diaconis, P., Ram, A.  
2012; 40 (5): 1861-1896
- **On Dirichlet eigenvectors for neutral two-dimensional Markov chains** *ELECTRONIC JOURNAL OF PROBABILITY*  
Champagnat, N., Diaconis, P., Miclo, L.  
2012; 17: 1-41
- **EXCHANGEABLE PAIRS OF BERNOULLI RANDOM VARIABLES, KRAWTCHOUK POLYNOMIALS, AND EHRENFEST URNS** *AUSTRALIAN & NEW ZEALAND JOURNAL OF STATISTICS*  
Diaconis, P., Griffiths, R.  
2012; 54 (1): 81-101
- **Supercharacters, symmetric functions in noncommuting variables, and related Hopf algebras** *ADVANCES IN MATHEMATICS*  
Aguiar, M., Andre, C., Benedetti, C., Bergeron, N., Chen, Z., Diaconis, P., Hendrickson, A., Hsiao, S., Isaacs, I. M., Jedwab, A., Johnson, K., Karaali, G., Lauve, et al  
2012; 229 (4): 2310-2337
- **On the spectral analysis of second-order Markov chains** *Annales de la Faculté des Sciences de Toulouse, Mathématiques*  
Diaconis, P., Miclo, L.  
2012; 22: 573-621
- **Riffle Shuffles with Biased Cuts** *Formal Power Series and Algebraic Combinatorics Conference*

- 
- Assaf, S., Diaconis, P., Soundararajan, K.  
2012
- **RANDOM GRAPHS WITH A GIVEN DEGREE SEQUENCE** *ANNALS OF APPLIED PROBABILITY*  
Chatterjee, S., Diaconis, P., Sly, A.  
2011; 21 (4): 1400-1435
  - **The Mathematics of Mixing Things Up** *JOURNAL OF STATISTICAL PHYSICS*  
Diaconis, P.  
2011; 144 (3): 445-458
  - **Geometric analysis for the metropolis algorithm on Lipschitz domains** *INVENTIONES MATHEMATICAE*  
Diaconis, P., Lebeau, G., Michel, L.  
2011; 185 (2): 239-281
  - **A RULE OF THUMB FOR RIFFLE SHUFFLING** *ANNALS OF APPLIED PROBABILITY*  
Assaf, S., Diaconis, P., Soundararajan, K.  
2011; 21 (3): 843-875
  - **On Barycentric Subdivision** *COMBINATORICS PROBABILITY & COMPUTING*  
Diaconis, P., Miclo, L.  
2011; 20 (2): 213-237
  - **Magical Mathematics: The Mathematical Ideas that Animate Great Magic Tricks**  
Diaconis, P., Graham, R.  
Princeton University Press.2011
  - **STOCHASTIC ALTERNATING PROJECTIONS** *ILLINOIS JOURNAL OF MATHEMATICS*  
Diaconis, P., Khare, K., Saloff-Coste, L.  
2010; 54 (3): 963-979
  - **ON ADDING A LIST OF NUMBERS (AND OTHER ONE-DEPENDENT DETERMINANTAL PROCESSES)** *BULLETIN OF THE AMERICAN MATHEMATICAL SOCIETY*  
Borodin, A., Diaconis, P., Fulman, J.  
2010; 47 (4): 639-670
  - **Functions of random walks on hyperplane arrangements** *ADVANCES IN APPLIED MATHEMATICS*  
Athanasiadis, C. A., Diaconis, P.  
2010; 45 (3): 410-437
  - **Threads Through Group Theory** *International Conference on the Character Theory of Finite Groups, in Honor of I Martin Isaacs*  
Diaconis, P.  
AMER MATHEMATICAL SOC.2010: 33-47
  - **Geometric Analysis for the Metropolis Algorithm on Lipschitz Domains** *Inventiones Mathematicae*  
Diaconis, P., Lebeau, G., Michel, L.  
2010; 185 (2): 239-281
  - **Properties of Uniform Doubly Stochastic Matrices** *Annals of Applied Probability*  
Diaconis, P., Chatterjee, S., Sly, A.  
2010
  - **Gibbs Sampling, Conjugate Priors and Coupling** *Sankhya*  
Diaconis, P., Khare, K., Saloff-Coste, L.  
2010; 72-A (1): 136-169
  - **Carries, Shuffling, and an Amazing Matrix** *AMERICAN MATHEMATICAL MONTHLY*  
Diaconis, P., Fulman, J.  
2009; 116 (9): 788-803

- **On Times to Quasi-stationarity for Birth and Death Processes** *JOURNAL OF THEORETICAL PROBABILITY*  
Diaconis, P., Miclo, L.  
2009; 22 (3): 558-586
- **Carries, shuffling, and symmetric functions** *ADVANCES IN APPLIED MATHEMATICS*  
Diaconis, P., Fulman, J.  
2009; 43 (2): 176-196
- **Micro-local analysis for the Metropolis algorithm** *MATHEMATISCHE ZEITSCHRIFT*  
Diaconis, P., Lebeau, G.  
2009; 262 (2): 411-447
- **SUPERCHARACTER FORMULAS FOR PATTERN GROUPS** *TRANSACTIONS OF THE AMERICAN MATHEMATICAL SOCIETY*  
Diaconis, P., Thiem, N.  
2009; 361 (7): 3501-3533
- **A Sequential Importance Sampling Algorithm for Generating Random Graphs With Prescribed Degrees** *Journal of Internet Mathematics*  
Diaconis, P., Blitzstein, J.  
2009; 6 (4): 489-522
- **Book Review: Probabilistic Symmetries and Invariance Principles by Olav Kallenberg, Probability and its Applications** *Bulletin of the American Mathematical Society*  
Diaconis, P.  
2009
- **Threshold Graph Limits and Random Threshold Graphs** *Journal of Internet Mathematics*  
Diaconis, P., Holmes, S., Janson, S.  
2009; 5 (3): 267-320
- **Riffle shuffles of a deck with repeated cards** *21st International Conference on Formal Power Series and Algebraic Combinatorics*  
Diaconis, P., Assaf, S., Soundararajan, K.  
2009: 89-102
- **FASTEST MIXING MARKOV CHAIN ON GRAPHS WITH SYMMETRIES** *SIAM JOURNAL ON OPTIMIZATION*  
Boyd, S., Diaconis, P., Parrilo, P., Xiao, L.  
2009; 20 (2): 792-819
- **On characterizations of Metropolis type algorithms in continuous time** *ALEA-LATIN AMERICAN JOURNAL OF PROBABILITY AND MATHEMATICAL STATISTICS*  
Diaconis, P., Miclo, L.  
2009; 6: 199-238
- **THE MARKOV CHAIN MONTE CARLO REVOLUTION** *BULLETIN OF THE AMERICAN MATHEMATICAL SOCIETY*  
Diaconis, P.  
2009; 46 (2): 179-205
- **HORSESHOES IN MULTIDIMENSIONAL SCALING AND LOCAL KERNEL METHODS** *ANNALS OF APPLIED STATISTICS*  
Diaconis, P., Goel, S., Holmes, S.  
2008; 2 (3): 777-807
- **On fixed points of permutations** *JOURNAL OF ALGEBRAIC COMBINATORICS*  
Diaconis, P., Fulman, J., Guralnick, R.  
2008; 28 (1): 189-218
- **Gibbs sampling, exponential families and orthogonal polynomials** *STATISTICAL SCIENCE*  
Diaconis, P., Khare, K., Saloff-Coste, L.  
2008; 23 (2): 151-178
- **Supercharacters and superclasses for algebra groups** *TRANSACTIONS OF THE AMERICAN MATHEMATICAL SOCIETY*  
Diaconis, P., Isaacs, I. M.

---

2008; 360 (5): 2359-2392

- **Comment: Gibbs Sampling, Exponential Families and Orthogonal Polynomials** *Statistical Science*  
Diaconis, P., Jones, G. L., Johnson, A. A.  
2008; 23 (2): 183-186
- **Rejoinder: Gibbs Sampling, Exponential Families and Orthogonal Polynomials** *Statistical Science*  
Diaconis, P., Khare, K., Saloff-Coste, L.  
2008; 23 (2): 196-200
- **Shuffling Cards, Adding Numbers, and Symmetric Functions** *19th ACM-SIAM Symposium on Discrete Algorithms*  
Diaconis, P.  
SIAM.2008: 560–560
- **Products of Universal Cycles** *A lifetime of puzzles: a collection of puzzles in honor of Martin Gardner*  
Diaconis, P., Graham, R. L.  
edited by Demain, E., Demaine, M., Rodgers, T.  
AK Peters, Ltd..2008: 35–55
- **Graph Limits and Exchangeable Random Graphs** *Rendiconti di Matematica*  
Diaconis, P., Janson, S.  
2008; VII (28): 33-61
- **Comment** *Journal of the American Statistical Association*  
Diaconis, P., Lehmann, E.  
2008; 103 (481): 16
- **Mathematical Statistics** *Princeton Companion to Mathematics*  
Diaconis, P.  
edited by Gowers, T.  
Princeton University Press.2008: 916-920
- **Comment: Gibbs Sampling, Exponential Families and Orthogonal Polynomials** *Statistical Science*  
Diaconis, P., Jones, G. L., Johnson, A. A.  
2008; 23 (2): 183-186
- **Rejoinder: Gibbs Sampling, Exponential Families and Orthogonal Polynomials** *Statistical Science*  
Diaconis, P., Khare, K., Saloff-Coste, L.  
2008; 23 (2): 196-200
- **Shuffling Cards, Adding Numbers, and Symmetric Functions** *19th ACM-SIAM Symposium on Discrete Algorithms*  
Diaconis, P.  
SIAM.2008: 560–560
- **Dynamical bias in the coin toss** *SIAM REVIEW*  
Diaconis, P., Holmes, S., Montgomery, R.  
2007; 49 (2): 211-235
- **The Solutions to Elmsley's Problem** *Math Horizons*  
Diaconis, P., Graham, R. L.  
2007; 14: 22-27
- **Hit and Run as a Unifying Device** *Journal de la Société Française de Statistique*  
Diaconis, P., Graham, R. L.  
2007; 148 (4): 5-28
- **The fastest mixing Markov process on a graph and a connection to a maximum variance unfolding problem** *SIAM REVIEW*  
Sun, J., Boyd, S., Xiao, L., Diaconis, P.  
2006; 48 (4): 681-699

- **Separation cut-offs for birth and death chains** *ANNALS OF APPLIED PROBABILITY*  
Diaconis, P., Saloff-Coste, L.  
2006; 16 (4): 2098-2122
- **Bayesian analysis for reversible Markov chains** *ANNALS OF STATISTICS*  
Diaconis, P., Rolles, S. W.  
2006; 34 (3): 1270-1292
- **Examples comparing importance sampling and the metropolis algorithm** *ILLINOIS JOURNAL OF MATHEMATICS*  
Bassetti, F., Diaconis, P.  
2006; 50 (1): 67-91
- **Markov bases for noncommutative Fourier analysis of ranked data** *Workshop on Computational Algebraic Statistics*  
Diaconis, P., Eriksson, N.  
ACADEMIC PRESS LTD- ELSEVIER SCIENCE LTD.2006: 182–95
- **Fastest mixing Markov chain on a path** *AMERICAN MATHEMATICAL MONTHLY*  
Boyd, S., Diaconis, P., Sun, J., Xiao, L.  
2006; 113 (1): 70-74
- **Sequential Monte Carlo methods for statistical analysis of tables** *JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATION*  
Chen, Y. G., Diaconis, P., Holmes, S. R., Liu, J. S.  
2005; 100 (469): 109-120
- **Analysis of a Bose-Einstein Markov chain** *ANNALES DE L INSTITUT HENRI POINCARÉ-PROBABILITÉS ET STATISTIQUES*  
Diaconis, P.  
2005; 41 (3): 409-418
- **Exchangeable Pairs and Poisson Approximation** *Probability Surveys*  
Diaconis, P., Chatterjee, S., Meckes, E.  
2005; 2 (1): 64-106
- **Symmetry Analysis of Reversible Markov Chains** *Journal of Internet Mathematics*  
Diaconis, P., Boyd, S., Parrilo, P., Xiao, L.  
2005; 2 (1): 31-71
- **What is...a Random Matrix** *Notices of the American Mathematical Society*  
Diaconis, P.  
2005; 52 (11): 1348-1349
- **Fastest mixing Markov chain on a graph** *SIAM REVIEW*  
Boyd, S., Diaconis, P., Xiao, L.  
2004; 46 (4): 667-689
- **A super-class walk on upper-triangular matrices** *JOURNAL OF ALGEBRA*  
Arias-Castro, E., Diaconis, P., Stanley, R.  
2004; 278 (2): 739-765
- **Random matrices, magic squares and matching polynomials** *ELECTRONIC JOURNAL OF COMBINATORICS*  
Diaconis, P., Gamburd, A.  
2004; 11 (2)
- **The Markov moment problem and de Finetti's theorem: Part I** *MATHEMATISCHE ZEITSCHRIFT*  
Diaconis, P., Freedman, D.  
2004; 247 (1): 183-199
- **The Markov moment problem and de Finetti's theorem: Part II** *MATHEMATISCHE ZEITSCHRIFT*  
Diaconis, P., Freedman, D.  
2004; 247 (1): 201-212

- **Numerical results for the metropolis algorithm** *EXPERIMENTAL MATHEMATICS*  
Diaconis, P., Neuberger, J. W.  
2004; 13 (2): 207-213
- **Uses of Exchangeable Pairs in Monte Carlo Markov Chains** *Stein's Method: Expository Lectures and Applications*  
Diaconis, P., Stein, C., Holmes, S., Reinert, G.  
edited by Diaconis, P., Holmes, S.  
Institute of Mathematical Statistics.2004: 1–26
- **On the Distribution of the Greatest Common Divisor** *A Festschrift for Herman Rubin*  
Diaconis, P., Erdős, P.  
edited by Dasgupta, A.  
Institute of Mathematical Statistics.2004: 126–137
- **Stein's Method for Markov Chains: First Examples** *Stein's Method: Expository Lectures and Applications*  
Diaconis, P.  
edited by Diaconis, P., Holmes, S.  
Institute of Mathematical Statistics.2004: 27–43
- **The Poisson-Dirichlet law is the unique invariant distribution for uniform split-merge transformations** *ANNALS OF PROBABILITY*  
Diaconis, P., Mayer-Wolf, E., Zeitouni, O., Zerner, M. P.  
2004; 32 (1B): 915-938
- **New tests of the correspondence between unitary eigenvalues and the zeros of Riemann's zeta function** *JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL*  
Coram, M., Diaconis, P.  
2003; 36 (12): 2883-2906
- **Patterns in eigenvalues: The 70th Josiah Willard Gibbs Lecture** *BULLETIN OF THE AMERICAN MATHEMATICAL SOCIETY*  
Diaconis, P.  
2003; 40 (2): 155-178
- **Brownian Motion and the Classical Groups** *Probability, Statistics and their applications: Papers in Honor of Rabii Bhattacharaya*  
Diaconis, P., D'Aristotile, A., Newman, C.  
edited by Athreya, K., Majumdar, M., Puri, M., Waymire, E.  
Institute of Mathematical Statistics.2003: 97–116
- **Random Walk on Groups: Characters and Geometry** *Groups St. Andrews, 2001*  
Diaconis, P.  
edited by Campbell, C. M., Roberson, E. F., Smith, G. C.  
Oxford: Cambridge University Press.2003: 120–142
- **New Tests of the Correspondence Between Unitary Eigenvalues and the Zeros of Riemann's Zeta Functions** *Journal of Physics A: Mathematics and General*  
Diaconis, P., Coram, M.  
2003; 36 (12): 2883-2906
- **The Problem of Thinking Too Much** *Bulletin of the American Academy of Arts and Sciences*  
Diaconis, P.  
2003; LVI (3): 26-38
- **Mathematical Developments from the Analysis of Riffle-Shuffling** *Groups, Combinatorics and Geometry*  
Diaconis, P.  
edited by Ivanov, A., Fuanou, A., Liebeck, M.  
World Scientific.2003: 73–97
- **G. H. Hardy and probability???** *BULLETIN OF THE LONDON MATHEMATICAL SOCIETY*  
Diaconis, P.  
2002; 34: 385-402

- **The asymmetric one-dimensional constrained Ising model: Rigorous results** *JOURNAL OF STATISTICAL PHYSICS*  
Aldous, D., Diaconis, P.  
2002; 107 (5-6): 945-975
- **Toeplitz minors** *JOURNAL OF COMBINATORIAL THEORY SERIES A*  
Bump, D., Diaconis, P.  
2002; 97 (2): 252-271
- **A different construction of Gaussian fields from Markov chains: Dirichlet covariances** *BDI 2001 Conference*  
Diaconis, P., Evans, S. N.  
INST MATHEMATICAL STATISTICS.2002: 863-78
- **Random Walk on Trees and Matchings** *Electronic Journal of Probability*  
Diaconis, P., Holmes, S.  
2002; 7: 1-17
- **Unitary correlations and the Fejer kernel - Dedicated to Harold Widom on his 70th birthday** *MATHEMATICAL PHYSICS ANALYSIS AND GEOMETRY*  
Bump, D., Diaconis, P., Keller, J. B.  
2002; 5 (2): 101-123
- **A geometric interpretation of the Metropolis-Hastings algorithm** *STATISTICAL SCIENCE*  
Billera, L. J., Diaconis, P.  
2001; 16 (4): 335-339
- **Combinatorics for the East model** *ADVANCES IN APPLIED MATHEMATICS*  
Chung, F., Diaconis, P., Graham, R.  
2001; 27 (1): 192-206
- **Chutes and ladders in Markov chains** *JOURNAL OF THEORETICAL PROBABILITY*  
Diaconis, P., Durrett, R.  
2001; 14 (3): 899-926
- **Statistical problems involving permutations with restricted positions** *Symposium on State of the Art in Probability and Statistics: Festschrift for Willem R VanZwet*  
Diaconis, P., Graham, R., Holmes, S. P.  
INST MATHEMATICAL STATISTICS.2001: 195-222
- **Linear functionals of eigenvalues of random matrices** *TRANSACTIONS OF THE AMERICAN MATHEMATICAL SOCIETY*  
Diaconis, P., Evans, S. N.  
2001; 353 (7): 2615-2633
- **Analysis of a nonreversible Markov chain sampler** *ANNALS OF APPLIED PROBABILITY*  
Diaconis, P., Holmes, S., Neal, R. M.  
2000; 10 (3): 726-752
- **Immanants and finite point processes** *JOURNAL OF COMBINATORIAL THEORY SERIES A*  
Diaconis, P., Evans, S. N.  
2000; 91 (1-2): 305-321
- **Bounds for Kac's master equation** *COMMUNICATIONS IN MATHEMATICAL PHYSICS*  
Diaconis, P., Saloff-Coste, L.  
2000; 209 (3): 729-755
- **Analysis of systematic scan metropolis algorithms using Iwahori-Hecke algebra techniques** *MICHIGAN MATHEMATICAL JOURNAL*  
Diaconis, P., Ram, A.  
2000; 48: 157-190
- **A Bayesian Peek into Feller I** *Sankhya A*  
Diaconis, P., Holmes, S.

2000; 64 (3): 820-841

- **Longest increasing subsequences: From patience sorting to the Baik-Deift-Johansson theorem** *BULLETIN OF THE AMERICAN MATHEMATICAL SOCIETY*  
Aldous, D., Diaconis, P.  
1999; 36 (4): 413-432
- **Random walks and plane arrangements in three dimensions** *AMERICAN MATHEMATICAL MONTHLY*  
Billera, L. J., Brown, K. S., Diaconis, P.  
1999; 106 (6): 502-524
- **Iterated random functions** *SIAM REVIEW*  
Diaconis, P., Freedman, D.  
1999; 41 (1): 45-76
- **Matchings and phylogenetic trees** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Diaconis, P. W., Holmes, S. P.  
1998; 95 (25): 14600-14602
- **A place for philosophy? The rise of modeling in statistical science** *International Symposium on Current and Future Challenges in Applied Mathematics, to Mark the 50th Anniversary of the Division-of-Applied-Mathematics*  
Diaconis, P.  
UNIV PRESS INC.1998: 797-805
- **Consistency of Bayes estimates for nonparametric regression: normal theory** *BERNOULLI*  
Diaconis, P. W., Freedman, D.  
1998; 4 (4): 411-444
- **Walks on generating sets of groups** *INVENTIONES MATHEMATICAE*  
Diaconis, P., Saloff-Coste, L.  
1998; 134 (2): 251-299
- **Random walks and hyperplane arrangements** *ANNALS OF PROBABILITY*  
Brown, K. S., Diaconis, P.  
1998; 26 (4): 1813-1854
- **What do we know about the metropolis algorithm?** *27th Annual ACM Symposium on Theory of Computing*  
Diaconis, P., Saloff-Coste, L.  
ACADEMIC PRESS INC ELSEVIER SCIENCE.1998: 20-36
- **Algebraic algorithms for sampling from conditional distributions** *ANNALS OF STATISTICS*  
Diaconis, P., Sturmfels, B.  
1998; 26 (1): 363-397
- **Random Walk and Hyperplane Arrangements** *Annals of Probability*  
Diaconis, P., Brown, K.  
1998; 26 (4): 1813-1854
- **From Shuffling Cards to Walking Around the Building. An Introduction to Markov Chain Theory** *Proc. Int. Congress, Berlin*  
Diaconis, P.  
1998: 187-204
- **Magic** *Routledge Encyclopedia of Philosophy*  
Diaconis, P.  
edited by Craig, E.  
Routledge.1998
- **Lattice Walks and Primary Decomposition** *Mathematical Essays in Honor of Gian-Carlo Rota*  
Diaconis, P., Eisenbud, D., Sturmfels, B.  
edited by Sagan, B., Stanley, R. P.

1998: 173–194

- **The Graph of Generating Sets of an Abelian Group** *Colloquium Mathematicum*  
Diaconis, P., Graham, R. L.  
1998: 31-38
- **Are there still things to do in Bayesian statistics?** *Conference on Probability, Dynamics and Causality*  
Diaconis, P., Holmes, S.  
KLUWER ACADEMIC PUBL.1997: 5–18
- **Consistency of Bayes Estimates for Non-Parametric Regression: A Review** *Festschrift for Lucien LeCam*  
Diaconis, P., Freedman, D.  
edited by Pollard, D., Torgersen, E., Yang, G. L.  
New York: Springer.1997: 157–166
- **Walks on generating sets of Abelian groups** *PROBABILITY THEORY AND RELATED FIELDS*  
Diaconis, P., SALOFFCOSTE, L.  
1996; 105 (3): 393-421
- **Nash inequalities for finite Markov chains** *JOURNAL OF THEORETICAL PROBABILITY*  
Diaconis, P., SALOFFCOSTE, L.  
1996; 9 (2): 459-510
- **The cutoff phenomenon in finite Markov chains** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Diaconis, P.  
1996; 93 (4): 1659-1664
- **A Non-Measurable Tail Set** *Statistics, Probability and Game Theory, Papers in Honor of David Blackwell*  
Diaconis, P., Blackwell, D.  
edited by Ferguson, T. S., Shapley, L. S., MacQueen, J. B.  
Institute of Mathematical Statistics.1996: 1–5
- **Random Walks on Finite Groups: A Survey of Analytic Techniques** *Probability Measures on Groups XI*  
Diaconis, P., Saloff-Coste, L.  
edited by Heyer, H.  
World Scientific Singapore.1996: 44–75
- **Some New Tools for Dirichlet Priors, Proceedings of the Fifth Valencia International Meeting** *Bayesian Statistics 5*  
Diaconis, P.  
edited by Bernardo, J., Berger, J., Dawid, A., Smith, F.  
Oxford University Press.1996: 97–106
- **Logarithmic Sobolev Inequalities for Finite Markov Chains** *Annals of Applied Probability*  
Diaconis, P., Saloff-Coste, L.  
1996; 6: 695-750
- **Metrics on Compositions and Coincidences Among Renewal Sequences** *Random Discrete Structures*  
Diaconis, P., Holmes, S., Janson, S., Lalley, S. P., Pemantle, R.  
edited by Aldous, D., Pemantle, R.  
New York: Springer Verlag.1996: 81–102
- **Primitive partition identities** *International Combinatorics Colloquium, in Honor of Paul Erdos 80th Birthday*  
Diaconis, P., GRAHAM, R. L., Sturmfels, B.  
BOLYAI JANOS MATEMATIKA TARSULAT.1996: 173–192
- **HAMMERSLEYS INTERACTING PARTICLE PROCESS AND LONGEST INCREASING SUBSEQUENCES** *PROBABILITY THEORY AND RELATED FIELDS*  
Aldous, D., Diaconis, P.  
1995; 103 (2): 199-213

- **What Do We Know About the Metropolis Algorithm?** *Proceedings of the 27th Symposium on Theory of Computing*  
Diaconis, P., Saloff-Coste, L.  
1995: 112–129
- **RIFFLE SHUFFLES, CYCLES, AND DESCENTS** *COMBINATORICA*  
Diaconis, P., McGrath, M., Pitman, J.  
1995; 15 (1): 11-29
- **An Application of Harnack Inequalities to Random Walk on Nilpotent Quotients** *Journal Fourier Analysis and Applications*  
Diaconis, P., Saloff-Coste, L.  
1995: 189-207
- **NonParametric Binary Regression with Random Covariates** *Probability and Mathematical Statistics*  
Diaconis, P., Freedman, D.  
1995; 15: 243-273
- **GRAY CODES FOR RANDOMIZATION PROCEDURES** *STATISTICS AND COMPUTING*  
Diaconis, P., Holmes, S.  
1994; 4 (4): 287-302
- **ON THE EIGENVALUES OF RANDOM MATRICES** *JOURNAL OF APPLIED PROBABILITY*  
Diaconis, P., Shahshahani, M.  
1994; 31A: 49-62
- **Three Examples of the Markov Chain Monte Carlo Method** *Discrete Probability and Algorithms*  
Diaconis, P., Holmes, S.  
edited by Aldous, D., Saloff-Coste, L., Spencer, J., Steele, J. M.  
New York: Springer-Verlag.1994: 43–56
- **MODERATE GROWTH AND RANDOM-WALK ON FINITE-GROUPS** *GEOMETRIC AND FUNCTIONAL ANALYSIS*  
Diaconis, P., SALOFFCOSTE, L.  
1994; 4 (1): 1-36
- **Rectangular Arrays With Fixed Margins** *Discrete Probability and Algorithms*  
Diaconis, P., Gangolli, A.  
edited by Aldous, D., Saloff-Coste, L., Spencer, J., Steele, J. M.  
New York: Springer-Verlag.1994: 15–42
- **SPECTRAL-ANALYSIS FOR DISCRETE LONGITUDINAL DATA** *ADVANCES IN MATHEMATICS*  
Beckett, L., Diaconis, P.  
1994; 103 (1): 107-128
- **NONPARAMETRIC BINARY REGRESSION - A BAYESIAN-APPROACH** *ANNALS OF STATISTICS*  
Diaconis, P., Freedman, D. A.  
1993; 21 (4): 2108-2137
- **COMPARISON TECHNIQUES FOR RANDOM-WALK ON FINITE-GROUPS** *ANNALS OF PROBABILITY*  
Diaconis, P., SALOFFCOSTE, L.  
1993; 21 (4): 2131-2156
- **Comparison Theorems for Reversible Markov Chains** *Annals of Applied Probability*  
Diaconis, P., Saloff-Coste, L.  
1993; 3 (3): 696-730
- **DISCUSSION ON THE MEETING ON THE GIBBS SAMPLER AND OTHER MARKOV CHAIN-MONTE CARLO METHODS** *JOURNAL OF THE ROYAL STATISTICAL SOCIETY SERIES B-STATISTICAL METHODOLOGY*  
Clifford, P., Jennison, C., Wakefield, J., Phillips, D., Frigessi, A., Gray, A. J., Lawson, A., Forster, J., RAMGOPAL, P., Arslan, O., Constable, P. D., Kent, J. T., Wolff, et al  
1993; 55 (1): 53-102

- **Non-Parametric Binary Bayesian Regression: A Bayesian Approach** *Annals of Statistics*  
Diaconis, P., Freedman, D.  
1993; 21: 2018-2137
- **Foreward** *Probability Models and Statistical Analyses For Ranking Data*  
Diaconis, P.  
edited by Fligner, M., Verducci, J.  
New York: Springer.1993: xvii-xxiii
- **Efficient Computation of Isotypic Projections for the Symmetric Group** *DIMACS: Series in Discrete Mathematics and Theoretical Computer Science*  
Diaconis, P., Rockmore, D.  
edited by Finkelstein, L., Kantor, W.  
Center for Discrete Mathematics and Theoretical Computer Science.1993: 87–104
- **UNIVERSAL CYCLES FOR COMBINATORIAL STRUCTURES** *DISCRETE MATHEMATICS*  
Chung, F., Diaconis, P., Graham, R.  
1992; 110 (1-3): 43-59
- **BINOMIAL COEFFICIENT CODES OVER GF(2)** *DISCRETE MATHEMATICS*  
Diaconis, P., Graham, R.  
1992; 106: 181-188
- **AN AFFINE WALK ON THE HYPERCUBE** *JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS*  
Diaconis, P., Graham, R.  
1992; 41 (1-2): 215-235
- **Analysis of Top to Random Shuffles** *Combinatorics, Probability and Computing*  
Diaconis, P., Fill, J., Pitman, J.  
1992; 1: 135-155
- **Non Parametric Binary Bayesian Regression** *Festschrift for Raj Bahadur*  
Diaconis, P., Freedman, D.  
Indian Statistical Institute.1992
- **Eigen-Analysis for Some Examples of the Metropolis Algorithm** *Contemporary Mathematics*  
Diaconis, P., Hanlon, P.  
1992; 138: 99-117
- **Trailing the Dovetail Shuffle to its Lair** *Annals of Applied Probability*  
Diaconis, P., Bayer, D.  
1992; 2 (2): 294-313
- **Sufficiency as Statistical Symmetry** *Proceedings of the 100th Anniversary American Mathematical Society*  
Diaconis, P.  
edited by Browder, F.  
Providence: American Mathematics Society.1992: 15–26
- **Finite de Finetti Theorems in Linear Modules and Multivariate Analysis** *Scandinavian Journal of Statistics*  
Diaconis, P., Eaton, M. L., Lauritzen, S.  
1992; 19: 298-315
- **A Growth Model, A Game, An Algebra, Lagrange Inversion and Characteristic Classes** *Recondita Mathematics*  
Diaconis, P., Fulton, W.  
1991; 49: 95-119
- **Closed Form Summation for Classical Distributions: Variations on a Theme of Demovire** *Statistical Science*  
Diaconis, P., Zabell, S.  
1991; 61 (3): 284-302

- **Geometric Bounds for Eigenvalues of Markov Chains** *Annals of Applied Probability*  
Diaconis, P., Stroock, D.  
1991; 1 (1): 36-61
- **STRONG STATIONARY TIMES VIA A NEW FORM OF DUALITY** *ANNALS OF PROBABILITY*  
Diaconis, P., Fill, J. A.  
1990; 18 (4): 1483-1522
- **ON THE UNIFORM CONSISTENCY OF BAYES ESTIMATES FOR MULTINOMIAL PROBABILITIES** *ANNALS OF STATISTICS*  
Diaconis, P., Freedman, D.  
1990; 18 (3): 1317-1327
- **Finite Fourier Methods: Access to Tols** *Probabilistic combinatorics, Proceedings of Symposia in Applied Mathematics*  
Diaconis, P.  
1990: 171-194
- **CAUCHYS EQUATION AND DEFINETTIS THEOREM** *SCANDINAVIAN JOURNAL OF STATISTICS*  
Diaconis, P., Freedman, D. A.  
1990; 17 (3): 235-250
- **Applications of Groups Representations to Statistical Problems** *Proceedings International Congress of Mathematician, Kyoto*  
Diaconis, P.  
1990: 1037-1048
- **Asymptotic Analysis of a Random Walk on a Hypercube with Many Dimensions** *Random Structures and Algorithms*  
Diaconis, P., Graham, R. L., Morrison, J. A.  
1990; 1: 51-72
- **Efficient Computation of the Fourier Transform on Finite Groups** *Journal of the American Mathematical Society*  
Diaconis, P., Rockmore, D.  
1990; 3 (2): 297-332
- **Patterned Matrices** *Matrix Theory and Applications: Proceedings of Symposia in Applied Mathematics, American Mathematical Society*  
Diaconis, P.  
1990: 37-58
- **Bounds for Tail Probabilities of Weighted Sums of Independent Gamma Random Variables** *Topics in Statistical Dependence*  
Diaconis, P., Perlman, M.  
edited by Block, H. W., Sampson, A. R., Savits, T. H.  
Hayward, CA: Institute of Mathematical Statistics. 1990: 147-166
- **Examples for the Theory of Strong Stationary Duality with Countable State Spaces** *Probability in the Engineering and Informational Sciences*  
Diaconis, P., Fill, J.  
1990; 4: 157-180
- **Cauchy's Equation and de Finetti's Theorem** *Journal of Statistics*  
Diaconis, P., Freedman, D.  
1990; 17 (3): 235-250
- **METHODS FOR STUDYING COINCIDENCES** *JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATION*  
Diaconis, P., Mosteller, F.  
1989; 84 (408): 853-861
- **THE 1987 WALD MEMORIAL LECTURES - A GENERALIZATION OF SPECTRAL-ANALYSIS WITH APPLICATION TO RANKED DATA** *ANNALS OF STATISTICS*  
Diaconis, P.  
1989; 17 (3): 949-979
- **FAIR DICE** *AMERICAN MATHEMATICAL MONTHLY*  
Diaconis, P., Keller, J. B.

- 
- 1989; 96 (4): 337-339
- **Bounds for Tail Probabilities of Weighted Sums of Independent Gamma Random Variables** *Symposium on Dependence in Statistics and Probability*  
Diaconis, P.  
1989: 147–166
  - **ON MERGING OF PROBABILITIES** *SANKHYA-THE INDIAN JOURNAL OF STATISTICS SERIES A*  
DARISTOTILE, A., Diaconis, P., Freedman, D.  
1988; 50: 363-380
  - **HONEST BERNOULLI EXCURSIONS** *JOURNAL OF APPLIED PROBABILITY*  
Smith, L., Diaconis, P.  
1988; 25 (3): 464-477
  - **Application of the Method of Moments in Probability and Statistics** *Moments in Mathematics Proceedings of Symposia in Applied Mathematics, American Mathematical Society*  
Diaconis, P.  
1988: 125–142
  - **Conditional Limit Theorems for Exponential Families with Uniform Asymptotic Estimates and Applications to de Finetti's Theorem** *Theoretical Probability*  
Diaconis, P., Freedman, D.  
1988; 1: 381-410
  - **Recent Progress in de Finetti's Notions of Exchangeability** *Bayesian Statistics 3: Proceedings of the Third Valencia International Meeting*  
Diaconis, P., Bernardo, J., et al  
1988: 111–125
  - **Bayesian Numerical Analysis** *Statistical Decision Theory and Related Topics IV*  
Diaconis, P.  
edited by Berger, J., Gupta, S.  
New York: Springer-Verlag.1988: 163–175
  - **INEQUALITIES FOR LINEAR-COMBINATIONS OF GAMMA-RANDOM VARIABLES** *CANADIAN JOURNAL OF STATISTICS-REVUE CANADIENNE DE STATISTIQUE*  
Bock, M. E., Diaconis, P., Huffer, F. W., Perlman, M. D.  
1987; 15 (4): 387-395
  - **WHAT IS AN ANALYSIS OF VARIANCE - DISCUSSION** *ANNALS OF STATISTICS*  
Diaconis, P.  
1987; 15 (3): 917-921
  - **RANDOM-WALKS ARISING IN RANDOM NUMBER GENERATION** *ANNALS OF PROBABILITY*  
Chung, F. R., Diaconis, P., GRAHAM, R. L.  
1987; 15 (3): 1148-1165
  - **STRONG UNIFORM TIMES AND FINITE RANDOM-WALKS** *ADVANCES IN APPLIED MATHEMATICS*  
Aldous, D., Diaconis, P.  
1987; 8 (1): 69-97
  - **TIME TO REACH STATIONARITY IN THE BERNOULLI LAPLACE DIFFUSION-MODEL** *SIAM JOURNAL ON MATHEMATICAL ANALYSIS*  
Diaconis, P., Shahshahani, M.  
1987; 18 (1): 208-218
  - **Probabilistic-Geometric Theorems Arising from the Analysis of Contingency Tables** *Contributions to the Theory and Application of Statistics, A Volume in Honor of Herbert Solomon*  
Diaconis, P., Efron, B.  
Academic Press.1987: 103–125
  - **Fred Mosteller as a Mathematical Statistician** *A Statistical Model*
-

- 
- Diaconis, P., Lehmann, E.  
edited by Fienberg, S., Hoaglin, D., Kruskal, W., Tanur, J.  
New York: Springer-Verlag.1987: 59–80
- **The Subgroup Algorithm for Generating Uniform Random Variables** *Probability in the Engineering and Informational Sciences*  
Diaconis, P., Shahshahani, M.  
1987; 1: 15-32
  - **Projection Pursuit for Discrete Data** *Scandinavian Journal of Statistics*  
Diaconis, P.  
1987
  - **A DOZEN DE FINETTI-STYLE RESULTS IN SEARCH OF A THEORY** *ANNALES DE L INSTITUT HENRI POINCARÉ-PROBABILITES ET STATISTIQUES*  
Diaconis, P., Freedman, D.  
1987; 23: 397-423
  - **ON SQUARE ROOTS OF THE UNIFORM-DISTRIBUTION ON COMPACT-GROUPS** *PROCEEDINGS OF THE AMERICAN MATHEMATICAL SOCIETY*  
Diaconis, P., Shahshahani, M.  
1986; 98 (2): 341-348
  - **SHUFFLING CARDS AND STOPPING-TIMES** *AMERICAN MATHEMATICAL MONTHLY*  
Aldous, D., Diaconis, P.  
1986; 93 (5): 333-348
  - **ON THE CONSISTENCY OF BAYES ESTIMATES - REJOINDER** *ANNALS OF STATISTICS*  
Diaconis, P., Freedman, D.  
1986; 14 (1): 63-67
  - **ON THE CONSISTENCY OF BAYES ESTIMATES** *ANNALS OF STATISTICS*  
Diaconis, P., Freedman, D.  
1986; 14 (1): 1-26
  - **ON INCONSISTENT BAYES ESTIMATES OF LOCATION** *ANNALS OF STATISTICS*  
Diaconis, P., Freedman, D.  
1986; 14 (1): 68-87
  - **AN ELEMENTARY PROOF OF STIRLING FORMULA** *AMERICAN MATHEMATICAL MONTHLY*  
Diaconis, P., Freedman, D.  
1986; 93 (2): 123-125
  - **A Subjective Guide to Objective Chance** *Statistical Science*  
Diaconis, P., Engel, E.  
1986; 1: 171-174
  - **Products of Random Matrices and Computer Image Generation** *Contemporary Mathematics*  
Diaconis, P., Shahshahani, M.  
1986; 50: 173-182
  - **Applications of Noncommutative Fourier Analysis to Probability Problems** *Ecolé d' Été de Probabilités de St. Flours, XV-XVII, Springer Lecture Notes in Mathematics*  
Diaconis, P., et al  
Berlin: Springer-Verlag.1986: 51–100
  - **Applications of Noncommutative Fourier Analysis to Probability Problems** *Ecolé d' Été de Probabilités de St. Flours, XV-XVII, Springer Lecture Notes in Mathematics*  
Diaconis, P., et al  
Berlin: Springer-Verlag.1986: 51–100
  - **THE RADON-TRANSFORM ON Z<sub>2</sub><sup>k</sup>** *PACIFIC JOURNAL OF MATHEMATICS*
-

- 
- Diaconis, P., GRAHAM, R. L.  
1985; 118 (2): 323-345
- **Bayesian Statistics as Honest Work** *Proceedings of the Berkeley Conference in Honor of Jerzey Neyman and Jack Kiefer*  
Diaconis, P.  
edited by LeCam, L., Olshen, R.  
1985: 53–64
  - **Some Alternatives to Bayes' Rule** *Information and Group Decision Making, Proceedings of the Second University of California, Irvine Conference on Political Economy*  
Diaconis, P., Zabell, S.  
edited by Grofman, B., Owen, G.  
1985: 25–38
  - **Theories of Data Analysis: From Magical Thinking Through Classical Statistics** *Exploring Data Tables, Trends and Shapes*  
Diaconis, P.  
edited by Hoaglin, D., Mosteller, F., Tukey, J.  
New York: Wiley.1985: 1–36
  - **Quantifying Prior Opinion** *Bayesian Statistics 2. Proceedings of the 2nd Valencia International Meeting*  
Diaconis, P., Ylvisaker, D.  
edited by Bernardo, J. M., Degroot, M. H., Lindley, D. V., Smith, A. F.  
1985: 133–156
  - **TESTING FOR INDEPENDENCE IN A 2-WAY TABLE - NEW INTERPRETATIONS OF THE CHI-SQUARE STATISTIC** *ANNALS OF STATISTICS*  
Diaconis, P., Efron, B.  
1985; 13 (3): 845-874
  - **TESTING FOR INDEPENDENCE IN A 2-WAY TABLE - NEW INTERPRETATIONS OF THE CHI-SQUARE STATISTIC - REJOINDER** *ANNALS OF STATISTICS*  
Diaconis, P., Efron, B.  
1985; 13 (3): 905-913
  - **PROJECTION PURSUIT - DISCUSSION** *ANNALS OF STATISTICS*  
Diaconis, P.  
1985; 13 (2): 494-496
  - **ON NONLINEAR FUNCTIONS OF LINEAR-COMBINATIONS** *SIAM JOURNAL ON SCIENTIFIC AND STATISTICAL COMPUTING*  
Diaconis, P., Shahshahani, M.  
1984; 5 (1): 175-191
  - **ASYMPTOTICS OF GRAPHICAL PROJECTION PURSUIT** *ANNALS OF STATISTICS*  
Diaconis, P., Freedman, D.  
1984; 12 (3): 793-815
  - **ON INCONSISTENT BAYES ESTIMATES IN THE DISCRETE CASE** *ANNALS OF STATISTICS*  
Freedman, D., Diaconis, P.  
1983; 11 (4): 1109-1118
  - **M and N plots** *Recent Advances in Statistics*  
Diaconis, P., Friedman, J. H.  
edited by Rizvi, H., Rustagi, J., Siegmund, D.  
New York: Academic Press.1983: 425–447
  - **Frequency Properties of Bayes Rules** *Scientific Inference, Data Analysis, and Robustness*  
Diaconis, P., Freedman, D.  
edited by Box, G., Leonard, T., Wu, C. F.  
New York: Academic Press.1983: 105–115
  - **The Mathematics of Perfect Shuffles** *Advances in Applied Mathematics*

- 
- Diaconis, P., Graham, R. L., Kantor, W. M.  
1983; 4 (2): 175-196
- **COMPUTER-INTENSIVE METHODS IN STATISTICS** *SCIENTIFIC AMERICAN*  
Diaconis, P., Efron, B.  
1983; 248 (5): 116-?
  - **ON THE MAXIMUM DIFFERENCE BETWEEN THE EMPIRICAL AND EXPECTED HISTOGRAMS FOR SUMS** *PACIFIC JOURNAL OF MATHEMATICS*  
Diaconis, P., Freedman, D.  
1982; 100 (2): 287-327
  - **Bayes Rules for Location Problems** *Statistical Decision Theory and Related Topics III*  
Diaconis, P., Freedman, D.  
edited by Gupta, S., Berger, J.  
1982: 315-327
  - **ON THE DIFFERENCE BETWEEN THE EMPIRICAL HISTOGRAM AND THE NORMAL CURVE, FOR SUMS .2.** *PACIFIC JOURNAL OF MATHEMATICS*  
Diaconis, P., Freedman, D.  
1982; 100 (2): 359-371
  - **VARIABLES ON SCATTERPLOTS LOOK MORE HIGHLY CORRELATED WHEN THE SCALES ARE INCREASED** *SCIENCE*  
Cleveland, W. S., Diaconis, P., McGill, R.  
1982; 216 (4550): 1138-1141
  - **UPDATING SUBJECTIVE-PROBABILITY** *JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATION*  
Diaconis, P., Zabell, S. L.  
1982; 77 (380): 822-830
  - **DE FINETTIS THEOREM FOR SYMMETRIC LOCATION FAMILIES** *ANNALS OF STATISTICS*  
Freedman, D., Diaconis, P.  
1982; 10 (1): 184-189
  - **ON THE MODE OF AN EMPIRICAL HISTOGRAM FOR SUMS** *PACIFIC JOURNAL OF MATHEMATICS*  
Diaconis, P., Freedman, D.  
1982; 100 (2): 373-385
  - **ON INCONSISTENT M-ESTIMATORS** *ANNALS OF STATISTICS*  
Freedman, D. A., Diaconis, P.  
1982; 10 (2): 454-461
  - **ON THE STATISTICS OF VISION - THE JULESZ CONJECTURE** *JOURNAL OF MATHEMATICAL PSYCHOLOGY*  
Diaconis, P., Freedman, D.  
1981; 24 (2): 112-138
  - **Magical Thinking in the Analysis of Scientific Data** *Annals of the New York Academy of Science*  
Diaconis, P.  
1981; 364: 236-244
  - **Partial Exchangeability and Sufficiency** *Proceedings of the Indian Statistical Institute Golden Jubilee International Conference on Statistics: Applications and New Directions*  
Diaconis, P., Freedman, D.  
edited by Ghosh, J. K., Roy, J.  
1981: 205-236
  - **How Fast is the Fastest Fourier Transform** *Computer Science and Statistics: Proceedings of the 13th Symposium on the Interface*  
Diaconis, P.  
edited by Eddy, W. F.  
1981

- **On the Permanents of Complements of the Direct Sum of Identity Matrices** *Advances in Applied Mathematics*  
Diaconis, P., Chung, F., Graham, R. L., Mallows, C. L.  
1981; 2: 121-137
- **ON THE HISTOGRAM AS A DENSITY ESTIMATOR - L2 THEORY** *ZEITSCHRIFT FUR WAHRSCHEINLICHKEITSTHEORIE UND VERWANDTE GEBIETE*  
Freedman, D., Diaconis, P.  
1981; 57 (4): 453-476
- **THE ANALYSIS OF SEQUENTIAL EXPERIMENTS WITH FEEDBACK TO SUBJECTS** *ANNALS OF STATISTICS*  
Diaconis, P., Graham, R.  
1981; 9 (1): 3-23
- **THE PERSISTENCE OF COGNITIVE ILLUSIONS** *BEHAVIORAL AND BRAIN SCIENCES*  
Diaconis, P., Freedman, D.  
1981; 4 (3): 333-334
- **GENERATING A RANDOM PERMUTATION WITH RANDOM TRANSPOSITIONS** *ZEITSCHRIFT FUR WAHRSCHEINLICHKEITSTHEORIE UND VERWANDTE GEBIETE*  
Diaconis, P., Shahshahani, M.  
1981; 57 (2): 159-179
- **ON THE MAXIMUM DEVIATION BETWEEN THE HISTOGRAM AND THE UNDERLYING DENSITY** *ZEITSCHRIFT FUR WAHRSCHEINLICHKEITSTHEORIE UND VERWANDTE GEBIETE*  
Freedman, D., Diaconis, P.  
1981; 58 (2): 139-167
- **FINITE EXCHANGEABLE SEQUENCES** *ANNALS OF PROBABILITY*  
Diaconis, P., Freedman, D.  
1980; 8 (4): 745-764
- **Average Running Time of the Fast Fourier Transform** *Journal of Algorithms*  
Diaconis, P.  
1980; 1 (2): 187-208
- **DE FINETTI THEOREM FOR MARKOV-CHAINS** *ANNALS OF PROBABILITY*  
Diaconis, P., Freedman, D.  
1980; 8 (1): 115-130
- **de Finetti's Generalizations of Exchangeability** *Studies in Inductive Logic and Probability*  
Diaconis, P.  
edited by Jeffrey, R.  
1980
- **ROUNDING PERCENTAGES** *JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATION*  
Diaconis, P., Freedman, D.  
1979; 74 (366): 359-364
- **CONJUGATE PRIORS FOR EXPONENTIAL FAMILIES** *ANNALS OF STATISTICS*  
Diaconis, P., YLVISAKER, D.  
1979; 7 (2): 269-281
- **SOME TAUBERIAN THEOREMS RELATED TO COIN TOSSING** *ANNALS OF PROBABILITY*  
Diaconis, P., Stein, C.  
1978; 6 (3): 483-490
- **STATISTICAL PROBLEMS IN ESP RESEARCH** *SCIENCE*  
Diaconis, P.  
1978; 201 (4351): 131-136

- **DISTRIBUTION OF LEADING DIGITS AND UNIFORM-DISTRIBUTION MOD-1** *ANNALS OF PROBABILITY*  
Diaconis, P.  
1977; 5 (1): 72-81
- **2ND-ORDER TERMS FOR VARIANCES AND COVARIANCES OF NUMBER OF PRIME FACTORS - INCLUDING SQUARE FREE CASE** *JOURNAL OF NUMBER THEORY*  
Diaconis, P., Mosteller, F., Onishi, H.  
1977; 9 (2): 187-202
- **SPEARMANS FOOTRULE AS A MEASURE OF DISARRAY** *JOURNAL OF THE ROYAL STATISTICAL SOCIETY SERIES B-STATISTICAL METHODOLOGY*  
Diaconis, P., GRAHAM, R. L.  
1977; 39 (2): 262-268
- **FINITE FORMS OF DE FINETTS THEOREM ON EXCHANGEABILITY** *SYNTHESE*  
Diaconis, P.  
1977; 36 (2): 271-281
- **EXAMPLES FOR THEORY OF INFINITE ITERATION OF SUMMABILITY METHODS** *CANADIAN JOURNAL OF MATHEMATICS-JOURNAL CANADIEN DE MATHEMATIQUES*  
Diaconis, P.  
1977; 29 (3): 489-497
- **BUFFONS PROBLEM WITH A LONG NEEDLE** *JOURNAL OF APPLIED PROBABILITY*  
Diaconis, P.  
1976; 13 (3): 614-618
- **Protocol Issues in Randomized Clinical Trials of a Surgical Treatment of Duodenal Ulcer** *Costs, Risks and Benefits of Surgery*  
Diaconis, P.  
edited by Bunker, J., Barnes, B., Mosteller, F.  
Oxford University Press.1976