CURRICULUM VITAE
HWANG Hsien-Kuei

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EDUCATION

- Bachelor of Science (Mathematics) from National Tsing Hua University (1989)
- DEA (d'Informatique et Mathématiques Appliquées) degree from École Polytechnique (1991–1992)
- Ph.D. (Informatique) from École Polytechnique (1994)

EMPLOYMENT AND PROFESSIONAL EXPERIENCE

- Since August 2013: Distinguished Research Fellow, Institute of Statistical Science, Academia Sinica
- July 2006–July 2009: Deputy Director of the Institute
- May 2002–July 2013: Research fellow, Institute of Statistical Science, Academia Sinica
- August 2001–December 2002: Deputy Director of the Institute
- October 1998–April 2002: Associate research fellow, Institute of Statistical Science, Academia Sinica
- March 1995–September 1998: Assistant research fellow, Institute of Statistical Science, Academia Sinica

RESEARCH INTERESTS

Applied Probability, Analysis of Algorithms, Asymptotic Analysis

AWARDS

- Outstanding Research Award (National Science Council): 1998–1999; 2000–2001; 2002–2004
- Thematic project of Academia Sinica (2002–2004): Phase transitions in random discrete structures and algorithms
- Friedrich Wilhelm Bessel Research Awards of the Alexander von Humboldt Foundation: 2003
- National Science Council Research Fellow: 2005–2007; 2008–2010
- Academia Sinica Investigator Award: 2008–2012, 2015–2019
- National Science Council Distinguished Researcher: 2011
- Franco-Taiwanese Science Foundation Prize: 2013
- Academic Award of the Ministry of Education: 2013
- Simons Visiting Professor, Mathematisches Forschungsinstitut Oberwolfach: 2014
- CHOW Yuan-Shih Lecture Award: 2015

ACADEMIC VISIT

1996 • INRIA (Rocquencourt), April; • University of the Witwatersrand (Johannesburg), June

1997 • Vienna University of Technology (Vienna), July

1998 • Purdue University (West Lafayette), July

1999 • Graz University of Technology (Graz), July; • National University of Singapore, August

2000–2001 • School of Computer Science, McGill University, August 2000 – July 2001

2001 • Vienna University of Technology (Vienna), August; • University of Freiburg, August

2002 • National University of Singapore, January; • Hong Kong University of Science and Technology, February; • University of Versailles (Saint Quentin-en-Yvelines), September

2003 • Institute of Statistical Mathematics (Tokyo), March; • TU-Wien (Vienna), June; • J. W. Goethe-Universität (Frankfurt), July

2003–2004 • Institut für Stochastik und Mathematische Informatik, J. W. Goethe-Universität, Frankfurt, August 2003–June 2004

2004 • TU-Wien (Vienna), March; • INRIA-Rocquencourt (Projet ALGO), April; • J. W. Goethe-Universität, Frankfurt, August–September

2005 • J. W. Goethe-Universität, Frankfurt, March; • École polytechnique, June; • Uppsala University, August; • J. W. Goethe-Universität, Frankfurt, August

2006 • Université Paris-Nord, July

2007 • TU Wien, November; • J. W. Goethe-Universität, Frankfurt, December; • Paris-Nord, December

2008 • Hong Kong University of Science and Technology, June–July; • National University of Singapore, November; • Laboratoire d'Informatique de Paris-Nord, November; • Laboratoire d'Informatique de Paris 6, November

2009 • Institut Mittag-Leffler (Djursholm), January; • National University of Singapore, April; • Laboratoire d'Informatique de Paris 6, June and September; • J. W. Goethe-Universität, Frankfurt, September

2010 • Institute of Statistical Mathematics, Tokyo, Japan, February; • J. W. Goethe-Universität, Frankfurt, July and October; • Technische Universität Berlin, Berlin, July; • Keio University, September; • TU Wien, October; • Laboratoire d'Informatique de Paris 6, September

2011 • INRIA, Rocquencourt, February ; • J. W. Goethe-Universität, Frankfurt, April ; • National University of Singapore, May ; • Stellenbosch University, August ; • Institute of Statistical Mathematics, Tokyo, October ; • Laboratoire d'Informatique de Paris-Nord, December

2012 • Université Paris-Nord, January ; • Institute of Statistical Mathematics, Tokyo, June–August ; • J. W. Goethe-Universität, Frankfurt, October ; • Laboratoire d'Informatique de Paris 6, October; • National University of Singapore, December

2013 • Institute of Statistical Mathematics, Tokyo, July; • Université Paris-Nord, September ; • Université Paris-Nord, December; • Institute of Statistical Mathematics, Tokyo, December

2014 • Technische Universität Graz, January-February; • Stellenbosch University, February–March; • Institute of Statistical Mathematics, Tokyo, July–August; • Chinese University of Hong Kong, October ; • J. W. Goethe-Universität, Frankfurt, October; • Université Paris-Nord, December

2015 • Queen Mary University of London, February; • Institute of Mathematical Statistics, Tokyo, April; • Laboratoire d'Informatique de Paris 6, May; • Alpen-Adria-Universität Klagenfurt, June; • Technische Universität Wien, June; • Université Lille 1, November; • Laboratoire d'Informatique de Paris 6, November; • Laboratoire d'Informatique de Paris-Nord, November

2016 • Institute of Mathematical Statistics, Tokyo, March; • Technische Universität Graz, July; • Technische Universität Wien, July; • Institute of Mathematical Statistics, Tokyo, July-August; • Laboratoire d'Informatique de Paris 6, September; • Laboratoire d'Informatique de Paris-Nord,

September; • Carleton University, October; • Université de Caen Normandie, December; • Shanghai Jiaotong University, Shanghai, December

2017 • Laboratoire d'Informatique de Paris Nord, January; • J. W. Goethe-Universität, Frankfurt, May; • Laboratoire d'Informatique de Paris 6, May; • Technische Universität Wien, October; • Erwin Schrödinger International Institute for Mathematics and Physics, October; • Dalian University of Technology, November ; • Institute of Mathematical Statistics, Tokyo, December

2018 • Laboratoire d'Informatique de Paris 6, January & September; • University of New South Wales, February; • Waseda University, Tokyo, March; • Dalian University of Technology, May; • Northeast University at Qinhuangdao, May; • Qufu Normal University, May; • Technische Universität Wien, June & October; • Technische Universität Graz, July & October; • IRMA, L'Université de Strasbourg, September; • Uppsala University, November

2019 • Institute of Mathematical Statistics, Tokyo, March & April; • Technische Universität Wien, May; • Université de Caen Normandie, August & September; • Laboratoire d'Informatique de Paris-Nord, September; • J. W. Goethe-Universität, Frankfurt, October; • Technical University of Denmark, November; • Waseda University, December

2020 • Technische Universität Wien, January

CONFERENCE PRESENTATIONS

1997 • Average-Case Analysis of Algorithms (Dagstuhl), July
• Random Structures and Algorithms (Poznań), August

1998 • Average-Case Analysis of Algorithms (Princeton University), July
• The 10th Franco-Japanese and 5th Franco-Chinese International Workshop on Combinatorics and Computer Science (École Polytechnique), September

1999 • Average-Case Analysis of Algorithms (Barcelona), June
• Random Structures and Algorithms (Poznań), August

2000 • Average-Case Analysis of Algorithms (Gdańsk), July

2001 • Average-Case Analysis of Algorithms (Tatihou), July (*plenary speaker*)
• Random Structures and Algorithms (Poznań), August

2002 • Analysis of Algorithms (Strobl), June
• Algorithms and Asymptotics (Graz), July
• Workshop on Probability with Applications to Finance and Insurance (Hong Kong) July
• Colloquium on Mathematics and Computer Science: Algorithms, Trees, Combinatorics and Probabilities (Versailles), September

2003 • ISM Symposium on Statistics, Combinatorics and Geometry (ISM, Tokyo), March
• The Ninth Seminar on Analysis of Algorithms (San Miniato), June
• East-Asian Pacific Regional Conference (Bernoulli Society, Hong Kong), December

2004 • The Tenth Seminar on Analysis of Algorithms (MSRI, Berkeley), June
• Mini-Workshop on Probability Theory on Trees and Analysis of Algorithms (Oberwolfach), August
• Third Colloquium on Mathematics and Computer Science: Algorithms, Trees, Combinatorics and Probabilities (Vienna) September (*plenary speaker*)
• Probabilistic Analysis of Algorithms (ISM, Tokyo), November

2005 • Mini-Workshop on Recursive Distributional Equations (J.W. Goethe Universität, Frankfurt) March
• The 2005 International Conference on the Analysis of Algorithms, Barcelona, June
• The 12th International Conference on Random Structures and Algorithms, Poznań, August

2006 • Conference on Probability and Statistics (ISI, Calcutta) January 4–6

• NCTS January Workshop on Critical Phenomena and Complex Systems (Institute of Physics, Academia Sinica, Taipei) January 12–14

• The 9th International Conference on Probability Theory and Mathematical Statistics (Vilnius) June 26–30

• Analysis of Algorithms 2006 (Alden-Biesen, Belgium), July 2–7 (*plenary speaker*)

• Workshop on Probabilistic Methods in Combinatorics (Mariatrost, Graz) July 20–22

2008 • International Conference on the Analysis of Algorithms (Maresias) April 12–18

• The Seventh World Congress in Probability and Statistics (National University of Singapore) July 14–19

• AMS Fall Western Section Meeting, Special Session on Algorithmic Probability and Combinatorics (UBC, Vancouver) October 4–5

• Joint NUS-ISI Workshop on Recent Advances in Statistics and Probability (National University of Singapore) November 18–19

• Colloquium for Philippe Flajolet's 60th Birthday (École Normale Supérieure, Paris) December 1–2

2009 • Program in Discrete Probability, Mittag-Leffler Institute

2009 NCTS March Workshop on Critical Phenomena and Complex Systems (Taipei), March 28–30

• Summer School in Applied Probability; four lectures, each with 1.5 hours (Carleton University, Ottawa), May 20–21

• 20th International Conference on Probabilistic, Combinatorial, and Asymptotic Methods in the Analysis of Algorithms (Fréjus), June 14–19

• The First Seminar in Applied Probability and Statistics (Northeast Normal University, Changchun), July 21

• Conference on Probabilistic Techniques in Computer Science (Barcelona), September 14–18

2010 • ISM Symposium on Stochastic Models and Discrete Geometry (ISM, Tokyo), March 1–2

• Probability Approximations and Beyond: A conference in honour of Louis Chen on his 70th birthday (Singapore), June 25–26

• The 10th International Vilnius Conference on Probability and Mathematical Statistics (Vilnius), June 28–July 2

• The 34th Conference on Stochastic Processes and Their Applications (Senri-Chuo, Osaka), September 6–10

2011 • ALEA, Luminy (Marseille), March 7–11

• Mini-Workshop: Random Trees, Information and Algorithms (Oberwolfach), April 25–29 (two talks)

• International Conference on Designs, Matrices and Enumerative Combinatorics, May 19–22 (*plenary speaker*)

• 22th International Meeting on Probabilistic, Combinatorial, and Asymptotic Methods in the Analysis of Algorithms, Będlewo, Poland, June 12–18 (*plenary speaker*; two talks)

• Seminar on Stochastic Models and Discrete Geometry (ISM, Tokyo), October 6

• Philippe Flajolet and Analytic Combinatorics (Conference in the memory of Philippe Flajolet), Paris, December 14–16 (two talks)

2012 • ANALCO 2012, Kyoto, January 16

• Workshop on Stochastic Models and Computational Algorithms, ISM, Tokyo, July 19

• Extreme Value Theory and Applications, ISM, Tokyo, July 26–28

• École d'automne en Analyse d'Algorithmes et Modèles Aléatoires, Mahdia, Tunisia, October 17–20

2013 • ISI-ISM-ISSAS Joint Conference 2013, Taipei, January 31–February 1

- The 24th International Meeting on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms, Menorca, May 27–31
- The Sixth International Congress of Chinese Mathematicians, Taipei, July 14–19
- Seminar on Algorithms and Random Structures, Taipei, November 7
- Holonomix, Lyon, December 2–3

2014 • 2014 ISI-ISM-ISSAS Joint Meeting, New Delhi, February 20–21
- The 9th Cross-Strait Conference on Probability and Statistics, Taichung, May 17–18 (*Keynote Speaker*)
- The 25th International Conference on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms, Paris, June 16–20
- Probability, Trees and Algorithms, Oberwolfach, November 2–8.

2015 • 2015 ISI-ISM-ISSAS Joint Meeting, Tokyo, April 2-4.
- Theory of Evolutionary Algorithms, Dagstuhl Seminar 15211, May 17–22
- The 26th International Meeting on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms, Strobl, Austria, June 8–12
- The 24th South Taiwan Statistics Conference and 2015 Chinese Institute of Probability and Statistics Annual Meeting, June 27–28

2016 • 2016 One Day Workshop on Analytic and Enumerative Combinatorics, April 22
- The 27th International Conference on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms, Kraków, Poland, July 4–8 (*plenary speaker*)
- Workshop "Asymptotic Analysis of Algorithms & Combinatorial Structures", Paris, September 1–2
- Workshop in Analytic and Probabilistic Combinatorics, Banff, October 23–28
- The 10th ICSA International Conference, Shanghai, December 19–22

2017 • Meeting on Analytic Algorithmics and Combinatorics, Barcelona, January 16–17
- Journée en l'honneur de Michèle Soria, May 12
- International Conference on Combinatorics, Taipei, May 19–22 (*plenary speaker*)
- ALEA in Europe, Vienna, October 9–13 (long talk)
- Workshop on Enumerative Combinatorics, ESI, Vienna, October 16–20
- Tutorial and Workshop on Analytic and Enumerative Aspects of Combinatorics, NCTU, October 30–31

2018 • International Workshop at Waseda University 2018 (IWAWU2018)—Topics in Statistical Inference and Stochastics, Waseda University, March (*keynote speaker*)
- The 35th Workshop on Combinatorial Mathematics and Computation Theory, Providence University, May 11–12 (*keynote speaker*)
- Analysis of Algorithms, Uppsala, June 25–29
- The 12th International Vilnius Conference on Probability Theory and Mathematical Statistics and 2018 IMS Annual Meeting on Probability and Statistics, Vilnius, July 2–6
- 2018 Workshop on Combinatorics and Graph Theory, August 2–4.

2019 • Taipei International Workshop on Combinatorics & Graph Theory, February 20–23
- Analysis of Algorithms, Luminy, June 24–28
- The Third Workshop on Analytic and Enumerative Aspects of Combinatorics, Caen, August 30–31
- Probability, Statistics & Matrices, Tachikawa, November 11–12
- The 2019 Annual Meeting of the Taiwanese Mathematical Society, Taichung, December 7–8

2020 • One Day Workshop on Combinatorics, Taipei, July 29.

PROFESSIONAL ACTIVITIES

PROGRAM COMMITTEE MEMBER

- Asian Computing Science Conference, December 11–13, 1995, Pathumthani, Thailand
- The First Workshop on Analytic Algorithmics and Combinatorics (ANALCO04), January 10, 2004, New Orleans, USA
- International Conference on the Analysis of Algorithms, June 6–10, 2005, Barcelona, Spain
- Fourth Colloquium on Mathematics and Computer Science: Algorithms, Trees, Combinatorics and Probabilities, September 18–22, 2006, Nancy, France
- The Fourth Workshop on Analytic Algorithmics and Combinatorics (ANALCO07), January 6, 2007, New Orleans, USA
- 2007 Conference on Analysis of Algorithms (AofA'07) Juan-les-pins, France, June 17–22, 2007
- The Seventh Workshop on Analytic Algorithmics and Combinatorics (ANALCO10), January 16, 2010, Austin, USA
- The Eighth Workshop on Analytic Algorithmics and Combinatorics (ANALCO11), January 22, 2011, San Francisco, USA
- (co-Chair) The Ninth Meeting on Analytic Algorithmics and Combinatorics (ANALCO12), January 16, 2012, Kyoto, Japan
- The 23rd International Meeting on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms (AofA 2012), June 17–22, 2012, Montreal, Canada
- The 25th International Conference on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms (AofA 2014), Paris, June 16–20, 2014.
- Meeting on Analytic Algorithmics and Combinatorics (ANALCO16), January 11, 2016, Virginia, USA.
- The 25th International Conference on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms (AofA 2016), Kraków, July 4–8, 2016.
- The Genetic and Evolutionary Computation Conference (GECCO) 2018, Kyoto (Japan), July 15-19, 2018
- The 30th international Conference on Formal Power Series and Algebraic Combinatorics, Dartmouth College, Hanover (USA), July 16–20, 2018
- The 28th International Conference on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms (AofA 2019), Luminy, 2019.

STEERING COMMITTEE MEMBER

- Meeting on Analytic Algorithmics and Combinatorics (ANALCO13), January 6, 2013, New Orleans, USA
- Meeting on Analytic Algorithmics and Combinatorics (ANALCO14), January 6, 2014, Portland, USA
- Meeting on Analytic Algorithmics and Combinatorics (ANALCO15), January 5, 2015, San Diego, USA
- Meeting on Analytic Algorithmics and Combinatorics (ANALCO16), January 11, 2016, Virginia, USA
- International Conference on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms, 2017–2022

PUBLICATIONS OF HSIEN-KUEI HWANG

Ph.D. Thesis

[PhD94] *Théorèmes limites pour les structures combinatories et les fonctions arithmétiques*, Laboratoire d'Informatique, École Polytechnique, December, 1994 (under the supervision of Jean-Marc Steyaert).

Journal papers

[1] Asymptotic expansions for the Stirling numbers of the first kind, *Journal of Combinatorial Theory, Series A*, **71** (1995), 343–351 (MR 96k:11019).

[2] Large deviations for combinatorial distributions. I: central limit theorems, *Annals of Applied Probability*, **6** (1996), 297–319 (MR 97g:60041).

[3] Asymptotic expansion for the Lebesgue constants of the Walsh system, *Journal of Computational and Applied Mathematics*, **71** (1996), 237–243 (MR 97c:42050).

[4] Asymptotic behaviour of some infinite products involving prime numbers, *Acta Arithmetica*, **75** (1996), 339–350 (MR 97d:11140); Corrections: *Ibidem* **87** (1999), 391 (MR 1671566).

[5] Limit theorems for mergesort, *Random Structures and Algorithms*, **8** (1996), 319–336 (MR 99c:68062).

[6] Optimal algorithms for inserting a random element into a random heap, *IEEE Transactions on Information Theory*, **43** (1997), 784–787 (MR 97m:68040).

[7] A constant arising from the analysis of algorithms for determining the maximum of a random walk, *Random Structures and Algorithms*, **10** (1997), 333–335 (MR 98i:05007).

[8] Distribution of integer partitions with large number of summands, *Acta Arithmetica*, **78** (1997), 351–365 (MR 98b:11108).

[9] (with Y.-N. Yeh) Measures of distinctness for random integer partitions and compositions, *Advances in Applied Mathematics*, **19** (1997), 378–414 (MR 98d:11097).

[10] Asymptotic estimates of elementary probability distributions, *Studies in Applied Mathematics*, **99** (1997), 393–417 (MR 98e:62027).

[11] On convergence rates of central limit theorems for combinatorial structures, *European Journal of Combinatorics*, **19** (1998), 329–343 (MR 99c:60014).

[12] Large deviations of combinatorial distributions II. local limit theorems, *Annals of Applied Probability*, **8** (1998), 163–181 (MR 99i:60056).

[13] A Poisson ∗ geometric convolution law for the number of components in unlabelled combinatorial structures, *Combinatorics, Probability and Computing*, **7** (1998), 89–110 (MR 99e:05012).

[14] (with Z.-D. Bai, C.-C. Chao and W.-Q. Liang) On the variance of the number of maxima in random vectors and its applications, *Annals of Applied Probability*, **8** (1998), 886–895 (MR 99f:60019).

[15] Sur la répartition des valeurs des fonctions arithmétiques: le nombre de facteurs premiers d'un entier, *Journal of Number Theory*, **69** (1998), 135–152 (MR 99d:11100).

[16] (with C.-C. Chao and W.-Q. Liang) Expected measure of the union of random rectangles, *Journal of Applied Probability*, **35** (1998), 495–500 (MR 99e:60037).

[17] Asymptotics of divide-and-conquer recurrences: Batcher's sorting algorithm and a minimum Euclidean matching heuristic, *Algorithmica*, **22** (1998), 529–546 (MR 2000j:68206).

[18] A Poisson ∗ negative binomial convolution law for random polynomials over finite fields, *Random Structures and Algorithms*, **13** (1998), 17–47 (MR 99e:11149).

[19] (with Z.-D. Bai and W.-Q. Liang) Normal approximations of the number of records in geometrically distributed random variables, *Random Structures and Algorithms*, **13** (1998), 319–334 (MR 99k:60051).

[20] Asymptotic expansions of the mergesort recurrences, *Acta Informatica*, **35** (1998), 911–919 (MR 99i:68025).

[21] (with W.-M. Chen and G.-H. Chen) The cost distribution of queue-mergesort, optimal mergesorts, and power-of-two rules, *Journal of Algorithms*, **30** (1999), 423–448 (MR 99k:68035).

[22] Asymptotics of Poisson approximation to random discrete distributions: an analytic approach, *Advances in Applied Probability*, **31** (1999), 448–491 (MR 2000k:60054).

[23] Distribution of the number of factors in random ordered factorizations of integers, *Journal of Number Theory*, **81** (2000), 61–92 (MR 2001k:11183).

[24] (with B.-Y. Yang and Y.-N. Yeh) Presorting algorithms: an average-case point of view, *Theoretical Computer Science*, **242** (2000), 29–40 (MR 2001d:68067).

[25] (with H.-H. Chern and Y.-N. Yeh) Distribution of the number of consecutive records, *Random Structures and Algorithms*, **17** (2000), 169–196 (MR 2002c:60006).

[26] (with Z.-D. Bai, W.-Q. Liang and T.-H. Tsai) Limit theorems for the number of maxima in random samples from planar regions, *Electronic Journal of Probability*, **6** (2001), Paper 3, 41 pages (MR 2002f:60023).

[27] (with H.-H. Chern) Transitional behaviors of the average cost of quicksort with median-of-$(2t+1)$, *Algorithmica*, **29** (2001), 44–69. (MR 2003k:68044).

[28] Uniform asymptotics of some Abel sums arising in coding theory, *Theoretical Computer Science*, **263** (2001), 145–158 (MR 2002f:050154).

[29] Limit theorems for the number of summands in integer partitions, *Journal of Combinatorial Theory, Series A*, **96** (2001), 89–126 (MR 2002f:11138).

[30] (with H.-H. Chern) Phase changes in random m-ary search trees and generalized quicksort, *Random Structures and Algorithms*, 19 (2001), 316–358 (MR 2002k:68040).

[31] (with T.-H. Tsai) Quickselect and the Dickman function, *Combinatorics, Probability and Computing*, **11** (2002), 353–371 (MR 2003g:68031).

[32] (with F. Hubalek, W. Lew, H. M. Mahmoud and H. Prodinger) A multivariate view of random bucket digital search trees, *Journal of Algorithms*, **44** (2002), 121–158 (MR 2003m:68028).

[33] (with H.-H. Chern, T.-H. Tsai) An asymptotic theory for Cauchy-Euler differential equations with applications to analysis of algorithms, *Journal of Algorithms*, **44** (2002), 177–225 (MR 2003h:68161).

[34] (with R. Neininger) Phase change of limit laws in the quicksort recurrence under varying toll functions, *SIAM Journal on Computing*, **31** (2002), 1687–1722 (MR 2003m:68034).

[35] (with T.-H. Tsai) An asymptotic theory for recurrence relations based on minimization and maximization, *Theoretical Computer Science*, **290** (2003), 1475–1501 (MR 2004b:68197).

[36] Second phase changes in random m-ary search trees, and generalized quicksort: convergence rates, *Annals of Probability*, **31**:2 (2003), 609–629 (MR 2004b:60065).

[37] (with W.-M. Chen) Analysis in distribution of two randomized algorithms for finding the maximum in a broadcast communication model, *Journal of Algorithms*, **46**:2 (2003), 140–177 (MR 2004c:90008).

[38] (with H.-H. Chern) Partial match queries in random quadtrees, *SIAM Journal on Computing*, **32**:4 (2003), 904–915 (MR 2004g:68206).

[39] (with Z.-D. Bai and T.-H. Tsai) Berry-Esseen bounds for the number of maxima in planar regions, *Electronic Journal of Probability*, **8** (2003), Paper 9, 26 pages (MR 2004f:60019).

[40] (with W.-M. Chen, T.-H. Tsai) Efficient maxima-finding algorithms for random planar samples, *Discrete Mathematics and Theoretical Computer Science (Electronic)*, **6** (2003), 107–122 (MR 2004i:68225).

[41] (with P. Grabner) Digital sums and divide-and-conquer recurrences: Fourier expansions and absolute convergence, *Constructive Approximation*, **21**:2 (2005), 149–179 (MR 2005i:11097).

[42] (with H.-H. Chern) Limit distribution of the number of consecutive records, *Random Structures and Algorithms*, **26**:4 (2005), 404–417 (MR 2006c:60010).

[43] (with M. Drmota) Bimodality and phase transitions in the profile variance of random binary search trees, *SIAM Journal on Discrete Mathematics*, **19**:1 (2005), 19–45 (MR 2006m:68009).

[44] (with M. Drmota) Profiles of random trees: Correlation and width of random recursive trees and binary search trees, *Advances in Applied Probability*, **37**:2 (2005), 321–341 (MR 2006a:60012).

[45] (with Z.-D. Bai, L. Devroye and T.-H. Tsai) Maxima in hypercubes, *Random Structures and Algorithms*, **27**:3 (2005), 290–309 (MR 2006i:60009).

[46] (with H.-H. Chern) Partial match queries in random k-d trees, *SIAM Journal on Computing*, **35**:6 (2006), 1440–1466 (MR 2007b:68216).

[47] (with L. Devroye) Width and mode of the profile for some random trees of logarithmic height, *Annals of Applied Probability*, **16**:2 (2006), 886–918 (MR2007h:60009).

[48] (with M. Fuchs and R. Neininger) Profiles of random trees: Limit theorems for random recursive trees and binary search trees, *Algorithmica*, **46**:3-4 (2006), 367–407 (MR2008g:05048).

[49] Profiles of random trees: plane-oriented recursive trees, *Random Structures and Algorithms*, **30**:3 (2007), 380–413. (MR2008d:05138).

[50] (with H.-H. Chern and M. Fuchs) Phase changes in random point quadtrees, *ACM Transactions on Algorithms*, **3**:2, Article No. 12 (2007), 51 pages (MR 2008i:68023).

[51] (with S. Janson) Local limit theorems for finite and infinite urn models, *Annals of Probability*, **36**(3) (2008), 992–1022 (MR 2009f:60032).

[52] (with G. Park, P. Nicodème, W. Szpankowski) Profiles of tries, *SIAM Journal on Computing*, **38**(5) (2009), 1821–1880 (MR 2010h:68243).

[53] (with V. Zacharovas) A Charlier-Parseval approach to Poisson approximation and its applications, *Lithuanian Mathematical Journal*, **50**(1) (2010), 88–119 (MR 2011g:62034).

[54] (with M. Fuchs and V. Zacharovas), Asymptotic variance of random digital search trees, *Discrete Mathematics and Theoretical Computer Science* (Special issue in honor of Philippe Flajolet), **12**(2) (2010), 103–166 (dedicated to the 60th birthday of Philippe Flajolet) (MR 2012b:05232).

[55] (with T.-H. Tsai) Multivariate records based on dominance, *Electronic Journal of Probability*, **15** (2010), 1863–1892 (Paper 60) (MR 2012d:60151).

[56] (with S. Janson) A central limit theorem for random ordered factorizations of integers, *Electronic Journal of Probability*, **16** (2011), Paper 12, 347–361 (MR 2012d:11197); Errata: *Ibidem* **18** (2013), Paper 16, 3 pages.

[57] (with V. Zacharovas) Uniform asymptotics of Poisson approximation to the Poisson-binomial distribution, *Theory of Probability and Its Applications*, **55** (2011), 198–224 (MR 2012a:62041).

[58] (with W.-M. Chen and T.-H. Tsai), Maxima-finding algorithms for multidimensional samples: A two-phase approach, *Computational Geometry. Theory and Applications*, **45** (1–2) (2012), 33–53 (MR MR2842620).

[59] (with W.-C. Liu, H.-W. Chen, T.-H. Tsai) A fish tank model for assembling food webs, *Ecological Modelling*, **245** (2012) 166–175.

[60] (with T.-H. Tsai and W.-M. Chen) Threshold phenomena in k-dominant skylines of random samples, *SIAM Journal on Computing*, **42** (2) (2013), 405–441.

[61] (with H.-H. Chern, M.-I. Fernández-Camacho and C. Martínez), Psi-series method in equality of random trees and asymptotics of quadratic convolution recurrences, *Random Structures and Algorithms*, **44** (2014), 67–108.

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