

Publications of Miklós Bóna

- Books

1. **Combinatorics of Permutations**, a textbook for graduate students, second edition, *CRC Press-Chapman Hall*, **2012**.
2. **A Walk Through Combinatorics**, third edition, a textbook for fourth-year undergraduates, 540 pages. *World Scientific*, **2011**. (This book is now being translated into Korean.)
3. **A Walk Through Combinatorics**, second edition, *World Scientific*, **2006**.
4. **Introduction to Enumerative Combinatorics**, a textbook for fourth-year undergraduates, MacGraw-Hill, **2005**.
5. **Combinatorics of Permutations**, *CRC Press-Chapmann Hall*, **2004**.
6. **A Walk Through Combinatorics**, first edition, *World Scientific*, **2002**.
7. (with Sergey Shabanov) **Concepts in Calculus**, a two-semester calculus textbook, *University Press of Florida*, **2011, 2012**.

- Book Chapter

1. *On Three Notions of Monotone Subsequences*, in *Permutation Patterns*, Cambridge University Press, **2010**.

- Articles on Pattern Avoiding Permutations

1. *On the best upper bound for permutations avoiding a given pattern of a given length*, submitted.
2. *A new upper bound for 1324-avoiding permutations*, submitted.
3. *On a family of conjectures of Joel Lewis*, submitted.
4. *On non-overlapping patterns of permutations*, *Pure Math. Appl. (P.U. M. A.)* **22** (2011), no.2, 99-105.
5. *The absence of a pattern and the number of occurrences of another*, *Discrete Math. Theor. Comput. Sci.* **12** (2010), no. 2, 89-102.
6. *Where the monotone pattern (mostly) rules*, *Discrete Math.*, **308** (2008), 5782-5788.

7. *New Records on Stanley-Wilf Limits*. European Journal of Combinatorics, **28** (2007), vol. 1, 75-85.
8. *The limit of a Stanley-Wilf sequence is not always rational!*, Journal of Combinatorial Theory, Series A, **110** (2005), 223-235.
9. *A simple proof for the exponential upper bound for some tenacious patterns*, Adv. Appl. Math, **33** no. 1, (2004), 192-198.
10. *A survey of stack sorting disciplines*. Electronic J. Combin., **9** no. 2, (2003).
11. *A simplicial complex of 2-stack sortable permutations*. Advances in Applied Mathematics, **29** (2002), 499-508.
12. *Symmetry and Unimodality in t -stack sortable permutations*. Journal of Combinatorial Theory, **98**, no. 1, (2002), 201-209.
13. (with Bruce Sagan and Vincent Vatter) *Frequency sequences with no internal zeros*, Advances in Applied Mathematics, **28** (2002), 395-420.
14. (with Rodica Simion) *A self-dual poset on objects counted by the Catalan numbers and a type-B analogue*, Discrete Mathematics, Discrete Math. **220** (2000), no. 1-3, 35-49.
15. (with Daniel A. Spielman) *An Infinite Antichain of Permutations*, Electronic Journal of Combinatorics, **7** (2000).
16. *The permutation classes equinumerous to the Smooth class*, Electronic Journal of Combinatorics, **5** (1998).
17. *The Solution of a Conjecture of Stanley and Wilf for all layered patterns*. Journal of Combinatorial Theory, Series A, **85** (1999) 96-104.
18. *2-stack sortable permutations with a given number of ascents*. MSRI Preprint #1997-055.
19. *Permutations with one or two 132-subsequences*, Discrete Mathematics, **181** (1998), 267-274.
20. *Exact enumeration of 1342-avoiding permutations; A close link with labeled trees and planar maps* Journal of Combinatorial Theory, Series A, **80** (1997), 257-272.
21. *The number of permutations with exactly r 132-subsequences of is P -recursive in the size!* Advances in Applied Mathematics, **18** (1997), 510-522.
22. *Permutations avoiding certain patterns; The case of length 4 and generalizations*, Discrete Mathematics **175** (1997) 55-67.

- Articles on Analytic Combinatorics

1. (with Andrew Vince), *The Number of Ways to Assemble a Graph*, submitted.
2. (with Philippe Flajolet), *On the Probability that Two Phylogenetic Trees are isomorphic*, *Journal of Applied Probability*, **46** (2009) vol. 4, 1005–1019.
3. *Generalized Descents and Normality*, *Electronic Journal of Combinatorics*, **15** (1), 2008, N21.
4. *Real Zeros and Normal Distribution for statistics on Stirling permutations defined by Gessel and Stanley*, *SIAM Journal of Applied Mathematics*, **23** (2009), no. 1, 401–406.
5. *Real Zeros and Partitions without singleton blocks*, submitted.
6. *On a balanced property of compositions*, *Online Journal of Analytic Combinatorics*, **2** (2007).
7. (with Arnold Knopfmacher) *On the probability that certain pairs of compositions have the same number of parts*, *Annals of Combinatorics*, **14** (2010) 291–306.
8. *On a balanced property of derangements*, *Electronic Journal of Combinatorics*, **13** (2006), R102.

- Articles on Various Combinatorial Enumeration Problems

1. *A bijective proof of an identity extending a classic result of Hajós*, preprint.
2. (with Ryan Flynn) *The average number of block interchanges needed to sort a permutation*, *Information Processing Letters*, **109** (2009), 927–931.
3. *On two related questions of Wilf Concerning Standard Young Tableaux*, *European Journal of Combinatorics*, **30** (2009), 1318–1322.
4. (with Bruce Sagan) *On divisibility of Narayana numbers by primes*, *Journal of Integer Sequences*, **8** (2005), no. 2, Article 05.2.4.
5. *A Combinatorial proof for the log-concavity of a famous sequence enumerating permutations*, *Electronic Journal of Combinatorics*, **11** no. 2, (2004–2005).
6. *Split and Glue*, preprint.

7. (with Bruce Sagan) *Two injective proofs of a Conjecture of Simion and Sagan*, Journal of Combinatorial Theory, **102** (2003) 212-216.
8. *A simplicial complex of 2-stack sortable permutations*. Advances in Applied Mathematics, **29** (2002), 499-508.
9. (with Andrew MacLennan and Dennis White) *Permutations with Roots*, Random Structures and Algorithms, **17** (2000), no. 2, 157–167.
10. (with Noga Alon and Joel Spencer) *Packing Ferrers Shapes*, Combinatorics, Probability, and Computing, **9** (2000), no. 3, 205–211.
11. (with Richard Ehrenborg) *A combinatorial proof of the log-concavity of the numbers of permutations with k runs*, Journal of Combinatorial Theory, **90** (2000), no. 2. 293-303.
12. (with Michel Bousquet, Gilbert Labelle and Pierre Leroux) *Enumeration of m -ary cacti according to their vertex and degree distributions*, Advances of Applied Mathematics **24** (2000) 22-56.
13. *Partitions with k crossings*. The Ramanujan Journal, **3** (1999) 215-220.
14. *On the Endomorphism Conjecture for Posets with 0*, Order, **14** (1997-1998) 191-192.
15. *A Combinatorial proof of a result of Hetyei and Reiner on Foata-Strehl type permutation trees*, Annals of Combinatorics, **1** (1997) 119-122.

- Articles on Mathematical Biology

1. (with Meera Sitharam and Andrew Vince) *Enumeration of viral capsid assembly pathways: tree orbits under permutation group action*, Bull. Math. Biol. **73** (2011), no. 4, 726-753.
2. (with Meera Sitharam) *The Influence of Symmetry on the Probability of Assembly Pathways for Icosahedral Viral Shells*, Computational and Mathematical Methods in Medicine, **9** (2008), no. 3-4, 295–302.
3. (with Meera Sitharam) *Enumeration of Self-Assembly Pathways for symmetric macromolecular structures*, International Conference on Bioinformatics and its Applications, 2004.

- Articles on Magic Squares and Graphs

1. (with Ruriko Yoshida and Hyeong-Kwan Ju) On the enumeration of weighted graphs, *Discrete Applied Mathematics*, **155** (2007), no. 11, 1481-1496.
2. (with Hyeong-Kwan Ju) *Enumerating Solutions of a System of Linear Inequalities related to Magic Squares*, *Annals of Combinatorics*, **10** (2006), vol. 2, 179-191.
3. *A New Proof of the Formula for the number of the 3×3 Magic Squares*, *Mathematics Magazine*, **70** (1997), 201-203.
4. *Sur l'énumération des cubes magiques*, *Comptes Rendus de l'Academie des Sciences*, **316** (1993) 636-639.

- Articles on Ramsey Theory

1. (with Géza Tóth) *A Ramsey-type problem on right-angled triangles in space*, *Discrete Mathematics*, **150** (1996), 61-67.
2. *A Euclidean Ramsey Theorem*, *Discrete Mathematics*, **122** (1993), 349-352.
3. *Coloring space*, *Mathematical Spectrum*, **20** (1988), 71-73.