



孙怡东

教授

理学院院长/硕士生导师

[sydmath@dlnu.edu.cn](mailto:sydmath@dlnu.edu.cn)

#### 教育背景

大连理工大学理学博士（2003-2006）  
南开大学理学硕士（2000-2003）  
吉林大学理学学士（1996-2000）

#### 研究领域

计数组合数学、构造组合学

#### 代表性成果

论文类：

- (1) Yidong Sun and Fei Ma, Some new binomial sums related to the Catalan triangle, *The Electronic Journal of Combinatorics*, 21(1) (2014), P1.33. (SCI)
- (2) Yidong Sun and Luping Ma, Minors of a class of Riordan arrays related to weighted partial Motzkin paths, *European Journal of Combinatorics*, 39 (2014) 157-169. (SCI)
- (3) Yidong Sun, A simple proof of an identity of Lacasse, *The Electronic Journal of Combinatorics*, 2 (2013), P11. (SCI)
- (4) Yidong Sun, S. Wang and X. Guan, Further applications of Hsu's summation formula, *Ars Combinatoria*, 111(2013), 473-483. (SCI)
- (5) Yidong Sun, X. Wu and J. Zhuang, Congruences on the Bell polynomials and the derangement polynomials, *Journal of Number Theory*, 13(5)(2013), 1564-1571. (SCI)
- (6) Yidong Sun and Y. Xu, The largest singletons in weighted set partitions and its applications, *Discrete Mathematics and Theoretical Computer Science*, 13(3)(2011), 75-86. (SCI)
- (7) Yidong Sun and X. Wu, The largest singletons of set partitions, *European Journal of Combinatorics*, 32 (2011), 369-382. (SCI)

- (8) T. Mansour and Yidong Sun, Statistics on permutations, *Online Journal of Analytic Combinatorics*, 2010.
- (9) Yidong Sun and J. Zhuang, Lambda-factorials of  $n$ , *The Electronic Journal of Combinatorics* 17, (2010), #169. (SCI)
- (10) Yidong Sun and Z. Wang, Consecutive pattern avoidances in non-crossing trees, *Graphs and Combinatorics*, 26(6) (2010), 815--832. (SCI)
- (11) Yidong Sun, A simple bijection between binary trees and colored ternary trees, *The Electronic Journal of Combinatorics*, #N20. (SCI)
- (12) Yidong Sun, Two equivalent identities involving Eulerian numbers, *College Mathematics*, Volume 25, No. 6, Dec. (2009), 147--148.
- (13) Q. Yan, Yidong Sun and T. Wang, Identities involving the Fibonacci polynomials, *Ars Combinatoria*, Volume 93 (2009), 87--96. (SCI)
- (14) T. Mansour and Yidong Sun, Avoiding 2-letter even-signed patterns, *J. Math. Res. Expos.*, 29(5), 2009, 813--822.
- (15) Yidong Sun and Z. Wang, String pattern avoidances in generalized non-crossing trees, *Discrete Mathematics and Theoretical Computer Science*, 11(1), (2009), 79--94. (SCI)
- (16) Yidong Sun and X. Wang, Determinants involving generalized Stirling numbers, *Ars Combinatoria*, 92, 2009, 149--153. (SCI)
- (17) T. Mansour and Yidong Sun, Identities involving Narayana polynomials and Catalan numbers, *Discrete Math.*, V309, Issue 12, 28 June 2009, 4079--4088.
- (18) Yidong Sun and H. Zhang, Two kinds of hook length formulas for complete  $m$ -ary trees, *Discrete Math.*, 309, 2009, 2584--2588.
- (19) Yidong Sun, Potential polynomials and Motzkin paths, *Discrete Mathematics*, 309(9), 2009, 2640--2648.
- (20) Yidong Sun, The star of David rule, *Linear Algebra and its Applications*, 429 (8-9), 2008, 1954--1961.
- (21) T. Mansour and Yidong Sun, Excedance numbers for permutations in complex reflection groups, *Seminaire Lotharingien de Combinatoire*, 58, 2008, Article B58b.
- (22) T. Mansour and Yidong Sun, Bell polynomials and  $k$ -generalized Dyck paths, *Discrete Applied Mathematics*, 156(12), 2008, 2279--2292. (SCI)
- (23) T. Mansour and Yidong Sun, On the number of combinations without certain separations, *European Journal of Combinatorics*, 29, 2008, 1200--1206. (SCI)

- (24) T. Mansour and Yidong Sun, Dyck paths and partial Bell polynomials, *Australasian Journal of Combinatorics*, 42, 2008, 285--297.
- (25) Yidong Sun, An extension of Sellers' theorem on partitions and its application, *Ars Combinatoria*, 86, 2008, 3--11. (SCI)
- (26) T. Mansour, M. Schork and Yidong Sun, Motzkin numbers of higher rank generating function and explicit expression, *Journal of Integer Sequences*, 10, 2007, Article 07.7.4.
- (27) X. Wang and Yidong Sun, A new proof of a curious identity, *The Math. Gazette*, 91(502), 2007, 105--106.
- (28) Yidong Sun and C. Jia, Counting Dyck paths with strictly increasing peak sequences, *J. Math. Res. Expos.*, 27(2), 2007, 253--263.
- (29) Yidong Sun, Two classes of p-Stirling numbers, *Discrete Math.*, 306(21), 2006, 2801--2805.
- (30) Yidong Sun, Numerical triangles and several classical sequences, *The Fibonacci Quarterly*, 43(4), 2005, 359--370.
- (31) Yidong Sun, Identities involving some numbers related to Dyck paths, *J. Math. Res. Expos.*, 25(3), (2005), 441--446.
- (32) Yidong Sun, The statistic "number of udu's" in Dyck paths, *Discrete Math.*, 287(1-3), 2004, 177--186.

#### 代表性项目

- (1) 国家自然科学基金青年项目, No. 10801020, 组合结构的模式避免和模式包含问题的研究, 2009/01-2011/12, 已结题, 主持。
- (2) 国家自然科学基金数学天元基金项目, No. 10726021, Bell 多项式、有序分拆、禁位排列和 Dyck 路的研究, 2008/01-2008/12, 已结题, 主持。
- (3) 中央高校基本科研业务费青年教师科技创新项目, No. 2009QN070, 组合结构的孤立子, 2009/01-2010/12, 已结题, 主持。
- (4) 中央高校基本科研业务费青年教师科技创新项目, 计数序列的组合解释与代数性质, 项目编号: No. 2011QN056, 2011/01-2012/12, 已结题, 主持。
- (5) 中央高校基本科研业务费青年教师科技创新项目, 项目

编号：No. 3132014035，计数序列的 Hankel 变换与组合解释，2014/01-2015/12，已结题，主持。

- (6) 辽宁省“百千万人才工程”人选项目，计数序列的组合解释，  
2017/01-2018/12，主持，在研。

#### 荣誉奖励

- (1) 辽宁省“百千万”人才工程千层人选（2009年）；  
(2) 辽宁省优秀硕士论文指导教师（2011年、2013年）。

#### 社会兼职

美国数学评论(MR)评论员。

**其他** 指导研究生 10 人，其中毕业 8 人，两名研究生（2011 年、2013 年）荣获辽宁省优秀硕士论文。

