

Permanents

The papers mentioned in class on permanents are:

- [1] Zs. Baranyai, “On the Factorization of the Complete Uniform Hypergraph”, *Colloquia Math. Soc. János Bolyai*, 10 (1973) 91–108.
- [2] J. Touchard, “Sur un problème de permutations”, *C. R. Acad. Sci. Paris*, 198 (1934) 631–633.
- [3] J. Riordan, “Three-Line Latin Rectangles”, *American Math. Monthly*, 51 (1944) 450–452.
- [4] J. Riordan, “Three-Line Latin Rectangles—II”, *American Math. Monthly*, 53 (1946) 18–20.
- [5] P. Erdős and I. Kaplansky, “The Asymptotic Number of Latin Rectangles”, *American J. Math.*, 68 (1946) 230–236.
- [6] K. Yamamoto, “On the Asymptotic Number of Latin Rectangles”, *Japanese J. Math.*, 21 (1951) 113–119.
- [7] C. M. Stein, “Asymptotic Evaluation of the Number of Latin Rectangles”, *J. Combinatorial Theory (A)*, 25 (1978) 49.
- [8] C. D. Godsil and B. D. McKay, “Asymptotic Enumeration of Latin Rectangles”, *J. Combinatorial Theory (B)*, 48 (1990) 19–44.
- [9] B. L. van der Waerden, “Aufgabe 45”, *Jahresbericht Deutsch. Math.-Verein.*, 35 (1927) 117.
- [10] D. I. Falikman, “A Proof of the van der Waerden Conjecture on the Permanent of a Doubly Stochastic Matrix (Russian)”, *Matematicheskie Zametki*, 29 (1981) 931–938.
- [11] G. P. Egorychev, “The Solution of van der Waerden’s Problem for Permanents (Russian)”, *Doklady Akad. Nauk SSSR*, 258 (1981) 1041–1044.
- [12] H. Minc, “Upper Bounds for Permanents of $(0,1)$ -Matrices”, *Bull. American Math. Soc.*, 69 (1963) 789–791.
- [13] L. M. Brègman, “Some Properties of Nonnegative Matrices and Their Permanents (Russian)”, *Doklady Akad. Nauk SSSR*, 211 (1973) 27–30.
- [14] A. Schrijver, “A Short Proof of Minc’s Conjecture”, *J. Combinatorial Theory (B)*, 25 (1978) 80–83.

Two expositions of Egorychev’s proof in English are:

- [15] D. E. Knuth, “A Permanent Conjecture”, *American Math. Monthly*, 88:10 (1981) 731–740, 798.
- [16] J. H. van Lint, “Notes on Egoritsjev’s Proof of the van der Waerden Conjecture”, *Linear Algebra and Its Applications*, 39 (1981) 1–8.