Dan Romik
Publication list

Date last updated: June 29, 2020

Downloadable versions of the publications listed below can be found on my publications page [https://www.math.ucdavis.edu/~romik/publications/].

Book


    Available for download at [https://www.math.ucdavis.edu/~romik/book/].

Preprints


Journal publications


34. On the number of $n$-dimensional representations of $SU(3)$, the Bernoulli numbers, and the Witten zeta function. Acta Arithmetica 180 (2017), 111–159.


15. Random walks with $k$-wise independent increments (joint with Itai Ben-

14. Limit shapes for random square Young tableaux (joint with Boris Pittel).


12. Waiting for a bat to fly by (in polynomial time) (joint with Itai Ben-
jamini, Gady Kozma, László Lovász and Gábor Tardos). *Combinatorics,

66–68.

10. Some formulas for the central trinomial and Motzkin numbers. *J. of In-
teger Sequences* 6 (2003), article 03.2.3.


8. On distributions computable by random walks on graphs (joint with Guy
Proc. of the Fifteenth ACM-SIAM Symposium on Discrete Algorithms
(SODA04), 124–131.

7. Integrals, partitions, and cellular automata (joint with Alexander E. Hol-
3368.

1–17.


4. Projecting the surface measure of the sphere of $\ell_p^n$ (joint with Assaf Naor).

3. Some Comments on Euler’s Series for $\frac{z^2}{6}$, *The Math. Gazette*, July 2002,
281–284.


Publications in conference proceedings

- Sorting networks, staircase Young tableaux and last passage percolation
  (joint with Elia Bisi, Fabio Cunden and Shane Gibbons). In: Proceedings
  of the 32nd International Conference on Formal Power Series and Alge-
  braic Combinatorics (FPSAC 2020). *Séminaire Lotharingien de Combi-


• On distributions computable by random walks on graphs (joint with Guy Kindler). Proc. of the Fifteenth ACM-SIAM Symposium on Discrete Algorithms (SODA04), 124–131. (Extended abstract version of journal publication #8 listed above.)

**Patents**


**Software**

I have developed and self-published the following mathematical software applications and packages, which are available to download from my software webpage ([https://www.math.ucdavis.edu/~romik/software/](https://www.math.ucdavis.edu/~romik/software/)):

• Mac-based mathematical simulation apps:
  − ASM Simulator, 2009.
  − MacTableaux, 2008.
  − MacSort, 2008

• Research software packages:
  − SofaBounds, Unix software application, 2017. Developed jointly with Yoav Kallus.