

LIST OF PUBLICATIONS

LISA SAUERMANN

PREPRINTS AND SUBMITTED MANUSCRIPTS

- [32] C. Elsholtz, Z. Hunter, L. Proske, and L. Sauer mann,
Improving Behrend’s construction: Sets without arithmetic progressions in integers and over finite fields,
preprint.
- [31] M. Kwan and L. Sauer mann,
Resolution of the quadratic Littlewood–Offord problem,
submitted.
- [30] L. Sauer mann and Z. Xu,
Essential covers of the hypercube require many hyperplanes,
submitted.
- [29] L. Sauer mann and D. Zakharov,
A sharp Ramsey theorem for ordered hypergraph matchings,
submitted.
- [28] N. Alon, M. Bucić, L. Sauer mann, D. Zakharov, and O. Zamir,
Essentially tight bounds for rainbow cycles in proper edge-colourings,
submitted.
- [27] N. Alon, M. Bucić, and L. Sauer mann,
Unit and distinct distances in typical norms,
submitted.
- [26] A. Li and L. Sauer mann,
Sárközy’s Theorem in Various Finite Field Settings,
submitted.
- [25] C. Pohoata, L. Sauer mann, and D. Zakharov,
Sharp bounds for rainbow matchings in hypergraphs,
submitted.
- [24] L. Sauer mann,
On the probability of a Condorcet winner among a large number of alternatives,
submitted.

PAPERS ACCEPTED FOR PUBLICATION

- [23] L. Sauer mann and D. Zakharov,
On the Erdős-Ginzburg-Ziv Problem in large dimension,
American Journal of Mathematics, to appear.
- [22] L. Sauer mann,
Rota’s basis conjecture holds for random bases of vector spaces,
European Journal of Combinatorics (special volume for EUROCOMB21), to appear.

PUBLISHED PAPERS

- [21] M. Kwan, A. Sah, L. Sauer mann, and M. Sawhney,
Anticoncentration in Ramsey graphs and a proof of the Erdős-McKay conjecture,
Forum of Mathematics, Pi **11** (2023), Article e21, 74pp.
- [20] L. Sauer mann,
Finding solutions with distinct variables to systems of linear equations over \mathbb{F}_p ,
Mathematische Annalen **386** (2023), 1–33.
- [19] L. Sauer mann and Y. Wigderson,
Polynomials that vanish to high order on most of the hypercube,
Journal of the London Mathematical Society **106** (2022), 2379–2402.
- [18] A. Ferber, M. Kwan, and L. Sauer mann,
List-decodability with large radius for Reed–Solomon codes,
IEEE Transactions on Information Theory **68** (2022), 3823–3828.
A preliminary version appeared in *62nd Annual Symposium on Foundations of Computer Science (FOCS 2021)*, pp. 720–726, 2022.
- [17] M. Kwan and L. Sauer mann,
On the permanent of a random symmetric matrix,
Selecta Mathematica **28** (2022), Article 15, 29 pp.
- [16] M. Kwan, L. Sauer mann, and Y. Zhao,
Extension complexity of low-dimensional polytopes,
Transactions of the American Mathematical Society **375** (2022), 4209–4250.
- [15] A. Ferber, M. Kwan, and L. Sauer mann,
Singularity of sparse random matrices: simple proofs,
Combinatorics, Probability and Computing **31** (2022), 21–28.
- [14] L. Sauer mann,
On the speed of algebraically defined graph classes,
Advances in Mathematics **380** (2021), Article 107593, 55 pp.
- [13] L. Sauer mann,
On the size of subsets of \mathbb{F}_p^n without p distinct elements summing to zero,
Israel Journal of Mathematics **243** (2021), 63–79.
- [12] J. Fox, M. Kwan, and L. Sauer mann,
Anticoncentration for subgraph counts in random graphs,
Annals of Probability **49** (2021), 1515–1553.
- [11] J. Fox, M. Kwan, and L. Sauer mann,
Combinatorial anti-concentration inequalities, with applications,
Mathematical Proceedings of the Cambridge Philosophical Society **171** (2021), 227–248.
- [10] J. Fox, L. Sauer mann, and F. Wei,
On the inducibility problem for random Cayley graphs of abelian groups with a few deleted vertices,
Random Structures and Algorithms **59** (2021), 554–615.
- [9] M. Kwan and L. Sauer mann,
An algebraic inverse theorem for the quadratic Littlewood–Offord problem, and an application to Ramsey graphs,
Discrete Analysis 2020:12, 34 pp.
- [8] J. Fox and L. Sauer mann,
A completion of the proof of the Edge-statistics Conjecture,
Advances in Combinatorics 2020:4, 52 pp.

- [7] L. M. Lovász and L. Sauer mann,
A lower bound for the k -multicolored sum-free problem in \mathbb{Z}_m^n ,
Proceedings of the London Mathematical Society **119** (2019), 55–103.
- [6] E. Bates and L. Sauer mann,
An upper bound on the size of avoidance couplings,
Combinatorics, Probability and Computing **28** (2019), 325–334.
- [5] L. Sauer mann,
A proof of a conjecture of Erdős, Faudree, Rousseau and Schelp on subgraphs of minimum degree k ,
Journal of Combinatorial Theory Series B **134** (2019), 36–75.
- [4] J. Fox, L. M. Lovász, and L. Sauer mann,
A polynomial bound for the arithmetic k -cycle removal lemma in vector spaces,
Journal of Combinatorial Theory Series A **160** (2018), 186–201.
- [3] J. Fox and L. Sauer mann,
Erdős-Ginzburg-Ziv constants by avoiding three-term arithmetic progressions,
Electronic Journal of Combinatorics **25** (2018), no. 2, Paper 2.14, 9 pp.
- [2] L. Sauer mann,
On the μ -admissible set in the extended affine Weyl groups of E_6 and E_7 ,
Journal of Algebra **451** (2016), 526–543.
- [1] C. Reiher and L. Sauer mann,
Nash-Williams’ theorem on decomposing graphs into forests,
Mathematika **60** (2014), 32–36.