

CURRICULUM VITAE

Personal Information

Name: Sándor Kiss

Date of birth: 25 September 1981

Address: Budapest University of Technology and Economics,
Department of Algebra,
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Research interests: I am a number theorist but I also interested in analysis, algebra, combinatorics and probability theory.

Academic Appointments

2014 -: Assistant Professor, Budapest University of Technology and Economics

2011 - 2014: Research Fellow, Budapest University of Technology and Economics

2010 - 2011: Junior Research Fellow, Computer and Automation Research Institute of the Hungarian Academy of Sciences

Academic Degrees

2010: Phd in Mathematics, Eötvös University, Budapest

Ph.D. Thesis: ADDITIVE REPRESENTATION FUNCTIONS

Advisor: Professor András Sárközy

2005: Msc in Mathematics, Eötvös University, Budapest

M.sc. Thesis: ADDITIVE REPRESENTATION FUNCTIONS (in Hungarian)

Advisor: Professor András Sárközy

Teaching

- Eötvös University, Budapest:

2005-2012: Linear Algebra (10 semesters for undergraduates)

2007: Number Theory (1 semester for undergraduates)

- Budapest University of Technology and Economics:

2009-:

Calculus I. (Real variables, 3 semesters for undergraduates)

Calculus II. (Multivariate calculus, Linear Algebra, 3 semesters for undergraduates)

Calculus III. (Complex variables, Differential Equations, 6 semesters for undergraduates)

Advanced Linear Algebra (6 semesters for graduates)
Number Theory (6 semesters for undergraduates)
Algebraic Number Theory (3 semesters for graduates)
Algebraic and Arithmetical Algorithms (6 semesters for graduates)
Additive and Combinatorial Number Theory (6 semesters for graduates)
Basic Mathematics for foreign students (in English, 3 semesters for undergraduates) Abstract Algebra
(in English, 1 semester for undergraduates)
Linear Algebra (in English, 4 semester for undergraduates)
Cryptography and Coding Theory (2 semesters for undergraduates)
Graph Theory and Probability theory for civil engineers (in English, 3 semesters for graduates)

Invited talks

2017: CANT 2017 at CUNY
Vilnius Conference in Combinatorics and Number Theory
The music of numbers at ICMAT in Madrid.

2018: Integers Conference in Augusta, Georgia USA.

Other Professional Activities

2002-2003: Referee at KöMaL, the Hungarian Mathematical Journal for Secondary Schools
2005-2008: I worked at Eltecrypt research group, I learnt Cryptography and its applications.
2011-: Reviewer for Zentralblatt
2014-: Reviewer for MathSciNet
2011-: Referee for the following journals: Acta Mathematica Hungarica, Combinatorica, Publicationes Mathematicae Debrecen, Random structures and Algorithms, Discrete Mathematics, Bulletin of the Australian Math. Soc., Annales Univ. Sci. Budapest. Eötvös., Journal of Number Theory

Hosting a visiting Scholar

Quan-Hui Yang from Technical University of Nanjing, China.
So far I have supervised one Msc. and five Bsc. students.

Awards and Grants

Honor of the Dean of Budapest University of Technology and Economics, 2016.
2012-: Member of the research 4 grants of the Hungarian National Innovation and Research Office.
2018-: Bolyai Scholarship of the Hungarian Academy of Sciences
2018-2019-: Bolyai+ scholarship (UNKP-18-4) of the Ministry of Human Capacities.

LIST OF PUBLICATIONS

1. S. Kiss, *Generalization of a theorem on additive representation functions*, Annales Univ. Sci. Budapest. Eötvös, **48** (2005), 15-18.
2. S. Kiss, *On a regularity property of additive representation functions*, Periodica Mathematica Hungarica, **51** (2005), 31-35.
3. S. Z. Kiss, *On the monotonicity of an additive representation function*, Publicationes Math. Debrecen, **73** (2008), 489-495.
4. S. Z. Kiss, *On the number of representations of integers as the sum of k terms*, Acta Arithmetica, **139** (2009), 395-406.
5. S. Z. Kiss, *On Sidon sets which are asymptotic bases*, Acta Mathematica Hungarica, **128** (2010), 46-58.
6. J. Cilleruelo, S. Z. Kiss, I. Z. Ruzsa, C. Vinuesa, *Generalization of a theorem of Erdős and Rényi on Sidon sequences*, Random Structures and Algorithms, **37** (2010), 455-464.
7. S. Z. Kiss, *On the k -th difference of an additive representation function*, Studia Scientiarum Mathematicarum Hungarica, **48** (2011), 93-103.
8. S. Z. Kiss, Cs. Sándor, E. Rozgonyi, *Sets with almost coinciding representation functions*, Bulletin of the Australian Math. Soc., **89** (2014), 97-111.
9. S. Z. Kiss, Cs. Sándor, E. Rozgonyi, *On additive complement of a finite set*, Journal of Number Theory, **136** (2014), 195-203..
10. S. Z. Kiss, *On generalized Sidon sets which are asymptotic bases*, Annales Univ. Sci. Budapest. Eötvös, **57** (2014), 149-160.
11. S. Z. Kiss, Cs. Sándor, E. Rozgonyi, *On Sidon sets which are asymptotic bases of order 4*, Functiones et Approximatio Comm. Math., **51** (2014), 393-413.
12. S. Z. Kiss, Cs. Sándor, E. Rozgonyi, *Groups, partitions and representation functions*, Publicationes Math. Debrecen, **85** (2014), 425-433.
13. P. L. Erdős, S. Z. Kiss, I. Miklós, L. Soukup, *Constructing, sampling and counting graphical realizations of restricted degree sequences*,
14. S. Z. Kiss, I. Miklós, E. Tannier, *On Sampling SCJ rearrangement scenarios*, Theoretical Computer Science, **552** (2014), 83-98.
15. É. Hosszú, S. Z. Kiss, L. Rónyai, J. Tapolcai, *On a Parity Based Group Testing Algorithm*, Acta Cybernetica-Szeged, **22** (2015), 1-10.
16. S. Z. Kiss, Cs. Sándor, *On the maximum values of the additive representation functions*, International Journal of Number Theory, **12** (2016), 1055-1075.
17. S. Z. Kiss, Cs. Sándor, *On the multiplicativity of the linear combination of additive representation functions*, Ramanujan Journal, **44** (2017), 385-399.
18. S. Z. Kiss, Cs. Sándor, *Partitions of the set of nonnegative integers with the same representation functions*, Discrete Mathematics, **340** (2017), 1154-1161.
19. S. Z. Kiss, Cs. Sándor, Quan-Hui Yang, *On generalized Stanley sequences*, Acta Mathematica Hungarica, **154** (2018), 501-510.

20. S. Z. Kiss, Cs. Sándor, Quan-Hui Yang, *On a conjecture of Erdos about sets without k pairwise coprime integers*, SIAM Journal on Discrete Math., **32** (2018), 2453-2466.
21. S. Z. Kiss, Cs. Sándor, Quan-Hui Yang, *On minimal additive complements of integers*, Journal of Combinatorial Theory ser. A, **162** (2019), 344-353.
22. É. Hosszú, S. Z. Kiss, L. Rónyai, J. Tapolcai, O. Rottenstreich, *Bloom Filter with a False Positive Free Zone*, IEEE INFOCOM 2018, Honolulu USA.
23. S. Z. Kiss, Cs. Sándor, *On the structure of sets which has coinciding representation functions*, submitted.
24. S. Z. Kiss, Cs. Sándor, *Generalization of some results about the regularity properties of an additive representation function*, Acta Mathematica Hungarica, to appear.
25. S. Z. Kiss, P. Kutas, *An identification system based on the explicit isomorphism problem*, submitted.