Family name: Kiss, First name: Gergely Researcher unique identifiers:: ORCID: 0000-0001-5517-5148, Date of birth: April 1, 1984 Website: https://users.renyi.hu/~kigergo/ Nationality: Hungarian e-mail: kigergo57@gmail.com

#### EDUCATION

- 2015 PhD in Mathematics, Eötvös Loránd University, Faculty of Science, Budapest, Hungary Degree: Summa cum Laude Supervisor: Prof. Miklós Laczkovich
- 2009 MSc in Mathematics, Eötvös Loránd University, Faculty of Science, Budapest, Hungary
- 2002–2004 Studies in Applied Mathematics, Eötvös Loránd University, Faculty of Science, Budapest, Hungary

## CURRENT POSITION

2019 – Postdoctoral Research Fellow at Alfréd Rényi Institute of Mathematics, Budapest, Hungary Department of Analysis

#### PREVIOUS POSITIONS

- 2015 2018 Postdoctoral Fellow at University of Luxembourg Department of Mathematical Modelling
- 2013 2015 Research Assistant at Budapest University of Technology and Economics, Department of Stochastic MTA-BME Stochastics Research Group (04118)
  - 2013 Research Assistant at Alfréd Rényi Institute of Mathematics, Budapest, Hungary MTA-Renyi "Lendület" Groups and Graphs Research Group

### FELLOWSHIPS AND AWARDS

- 2019–2022 Premium Postdoctoral Fellowship of the Hungarian Academy of Science 2019 Bolyai János Research Fellowship (declined)
- 2015–2018 Postdoctoral Fellowship in Internal Research Project Luxembourg R-AGR-0500 2015 ISFE Medal awarded for the best contribution and talk

## TEACHING ACTIVITIES

- 2020–2021 Lecture course: Mathematics I. (In English) Eötvös Loránd University, Budapest, Hungary
- 2015–2018 Lecture course: Basics of Disrete Mathematics University of Luxembourg
- 2013–2015 Practice courses: Analysis I-IV., Partial differential equations, Probability Theory, Statistics, Mathematics II-IV. for Civil Engineering, Mathematics for Architects I-II. Budapest University of Technology and Economics
- 2012–2015 Organizing: Problem solving seminar I-II. Budapest University of Technology and Economics
- 2006–2012 Practice courses: Introduction to the Theory of Computing I.-II., Foundation of Computer Science, Algorithm Theory
- 2009–2012 Practice courses: Analysis I.-IV. Eötvös Loránd University, Budapest, Hungary
  - 2008 Practice courses: Probability Theory, Eötvös Loránd University, Budapest, Hungary

### SUPERVISION OF GRADUATE AND UNDERGRADUATE STUDENTS

- 2021– Jury member for 1 PhD thesis at University of Debrecen, Hungary
- 2016–2017 1 Master Student at University of Luxembourg, Luxembourg
- 2016–2020 $\,7$  MSc student research projects at University of Luxembourg
  - 2 BSc students at Eötvös Loránd University, Budapest
    - 2 BSc students at University of Luxembourg

## ORGANISATION OF SCIENTIFIC MEETINGS

- 2020 Main Organiser of Harmonic and Spectral Analysis conference (HSA 2020), http://mathspectral.hu/
- 2016 Main Organiser of International Symposium on Aggregation and Structures (ISAS 2016), https://math.uni.lu/isas/

## **REVIEWING ACTIVITIES**

- 2019 Editor of Periodica Mathematica Hungarica
- 2017 Scientific lector of the Textbook Miklós Laczkovich: 333 Exercises in Measure Theory (book written in Hungarian)
- 2013 Reviewer for Aequationes Math., Acta Math. Hung., Discrete Comput Geom,
  J. Math. Anal. Appl, Monatshefte für Mathematik, Period. Math. Hung.,
  Results in Mathematics, Opus. Math., Fuzzy Sets and Systems, Soft Computing
  AMS Mathematical Reviews, Zentralblatt MATH

# MEMBERSHIPS OF SCIENTIFIC SOCIETIES

- 2021 János Bolyai Mathematical Society
- 2021 Public Body of the Hungarian Academy of Sciences

## MAJOR COLLABORATIONS

- E. Gselmann, Spectral theory, difference and functional equations, Department of Analysis, University of Debrecen
- M. Laczkovich, Real analysis, measure theory, spectral theory, Department of Analysis, Eötvös Loránd University, Budapest
- R. D. Malikiosis, Fourier analysis, number theory, Fuglede's conjecture, Department of Mathematics, Aristotle University of Thessaloniki,
- J-L. Marichal, Semigroup theory, associativity, discrete optimization, Mathematics Research Unit, University of Luxembourg
- J. Pach, Discrete, convex and combinatorial geometry, Department of Geometry, Alfréd Rényi Institute of Mathematics
- G. Somlai, Algebra, representation theory, Fuglede's conjecture, Department of Algebra, Eötvös Loránd University, Budapest
- Cs. Vincze, Spectral theory, Finsler geometry, differential geometry, Department of Geometry, University of Debrecen
- M. Vizer, Finite geometry, extremal combinatorics, Department of Extremal Combinatorics, Alfréd Rényi Institute of Mathematics

## SELECTED INTERNATIONAL CONFERENCES, PRESENTATIONS AND VISITS

- Talk at Harmonic Analysis and PDE's seminar, Zoom, New York, USA- 2020
- Seminar talks at Alfréd Rényi Mathematical Institute 2013, 2014, 2019, 2020
- Keynote speaker at Dynamics, Equations and Applications (keynote speaker), Kraków, Poland-2019
- Research visits at University of Luxembourg 2019, 2020
- Research visit and talk in Séminaire Cristolien d'Analyse Multifractale at University Paris-Est - Créteil, France, 2018
- Research visit and seminar talk at University of Silesia in Katowice, Poland, 2018
- Research visit and talk in Discrete and Computational Geometry Seminar at École polytechnique fédérale de Lausanne, Switzerland, 2017
- Seminar talk at University of Luxembourg 2017, 2018
- Speaker at International Symposium on Functional Equations, Hungary, Poland, Austria, China 2013, 2014, 2015, 2016, 2017
- Seminar talks at Eötvös Loránd University, Budapest 2011, 2012, 2013, 2015, 2017,
- Speaker at Conference on Fractals and Related Fields III, France 2015
- Seminar talks at Budapest University of Technology and Economics 2011, 2013, 2015,
- Seminar talks at University of Debrecen 2013, 2014, 2015,
- Seminar talk at Charles University Prague, Chech Republic 2012,
- DAAD research visit and seminar talk at Universität Jena, Germany 2011

## SELECTED PUBLICATIONS

- T. Fallon, G. Kiss, G. Somlai, Fuglede's conjecture holds on  $(\mathbb{Z}_p)^2 \times (\mathbb{Z}_q)^2$ , preprint, 2021.
- G. Kiss, R.D. Malikiosis, G. Somlai, M. Vizer, Fuglede's conjecture holds for cyclic groups of order *pqrs*, submitted to *Journal of the London Mathematical Society*. https://arxiv.org/pdf/2011.09578.pdf
- G. Kiss, G. Somlai, Fuglede's conjecture holds on  $(\mathbb{Z}_p)^2 \times \mathbb{Z}_q$ , accepted at *Proc. Am. Math. Soc.* https://arxiv.org/pdf/1912.07114.pdf
- G. Kiss R.D. Malikiosis, G. Somlai, M. Vizer, On the discrete Fuglede and Pompeiu problems, Analysis & PDE 13 (3), 765-788, (2020).
- E. Gselmann, G. Kiss, Remarks on the notion of homo-derivations, Annales Uni. Sci. Budapest. 51, 111-130, (2020).
- E. Gselmann, G. Kiss, Cs. Vincze, Characterization of field homomorphisms through Pexiderized functional equations, J. Differ. Equ. Appl. 25 (12), 1645-1679, (2019).
- G. Kiss, M. Laczkovich, Derivations and differential operators on rings and fields, *Annales Uni. Sci. Budapest.* **48**, 31-43, (2018).
- E. Gselmann, G. Kiss, Cs. Vincze, On functional equations characterizing derivations: methods and examples, *Results Math.* 73:74, (2018)
- G. Kiss, M. Laczkovich, Cs. Vincze, The discrete Pompeiu problem on the plane, *Monatsh. Math* **186**(2), 299-314 (2018).
- G.Kiss, Cs. Vincze, On spectral sythesis in varieties containing the solutions of inhomogeneous linear functional equations, *Aequationes Math.* **91**(4), 691-723 (2017).
- G. Kiss, M. Laczkovich, Linear functional equations, differential operators and spectral synthesis, *Aequationes Math.* **89**(2), 301-328 (2015).
- G. Kiss, A. Varga, Existence of nontrivial solutions of linear functional equations, Aequationes Math. 88(1-2), 151-162 (2013).

The list of all the my papers can be found on my website: https://users.renyi.hu/~kigergo