

# Curriculum vitae

## ● PERSONAL INFORMATION:

Family name, First name: Komjáthy, Júlia  
Researcher unique identifier(s): ORCID 0000-0003-1919-6229  
Date of birth: 26 January 1985  
Nationality: Hungarian  
URL for the web site: <https://diamhomes.ewi.tudelft.nl/~jkomjathy/>

## ● EDUCATION:

2008 – 2012: **PhD (Summa Cum Laude)** *Department of Stochastics, Institute of Mathematics, Budapest University of Technology and Economics, Hungary*  
Supervisors: Márton Balázs, Károly Simon  
2003 – 2008: **Master (Summa Cum Laude)** *Department of Stochastics, Institute of Mathematics, Budapest University of Technology and Economics, Hungary*

## ● CURRENT POSITION:

2021 – ...: **Associate professor** *Delft University of Technology* Netherlands

## ● PREVIOUS POSITIONS:

2014 – 2021 **Assistant professor** (tenured since 2017) *Eindhoven University of Technology* Netherlands  
2014 Jun – Dec **Visiting assistant professor** *University of British Columbia, Canada*  
2013 Jan – Dec **Postdoctoral fellow** *Eindhoven University of Technology, Netherlands*  
2009 **Summer internship** at *Microsoft Research Theory Group, Redmond, USA*

## ● FELLOWSHIPS, GRANTS AND AWARDS:

2017: Wiskundeclusters PhD positions *NWO, NL (€205k)*  
2014: VENI Vernieuwingsimpuls, *Nederlandse Wetenschappelijke Organisatie (NWO), NL, €250k*  
2013: STAR tenure-track position, *NWO, Netherlands*  
2008: Rényi Kató Memorial Prize (Graduation award for students of Mathematics), Hungary

## ● SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS:

2020 – 2023: **postdoc:** Zsolt Bartha *Eindhoven University of Technology, NL*  
2013 – 2023: **4 finished PhD students:** Enrico Baroni (graduated 2017), Viktória Vadon (graduated 2020), Dániel Oláh (graduated July 2021), Joost Jorritsma (graduated April 2023), *TU Eindhoven, NL*  
2021 – ... **2 MSc and 5 BSc students'** supervision *TU Delft*  
2013 – 2021 **6 MSc and 7 BSc students'** supervision *TU Eindhoven*  
2008 – 2012: **2 MSc and 3 BSc students'** supervision *Budapest University of Technology and Economics, HUN*

## ● TEACHING ACTIVITIES:

2021 – : responsible lecturer: **Advanced Topics in Probability** (WI4465, 2 times) *TU Delft*  
2021 – : responsible lecturer: **Advanced Probability** (AM3560, 2 times) *TU Delft*  
2021 – : lecturer: **Introduction to Probability and Statistics** (EE1M31, WI2180) *TU Delft*  
2013 – 2021: responsible lecturer: **Random Graphs** (2MMS60, 6 times) *TU Eindhoven*  
responsible lecturer: **Advanced Probability 2** (2MMS30, lecturer, 5 times) *TU Eindhoven*  
2014 responsible lecturer: **Multivariable and Vector Calculus**, (Math 217, once) *UBC, Canada*  
2008 – 2012 **TA** for Stochastic Processes (1×), Probability Theory I. and II. (5×, 3×), Multivariate analysis and Matrix algebra (7×), Probability Theory (3×), *Budapest University of Technology, HUN*

● ORGANISATION OF SCIENTIFIC MEETINGS:

- 2020 Jan 17–21 : **Oberwolfach** workshop: *Spatial Networks and Percolation Random Graphs*.  
Role: co-organiser
- 2017 Sep 11–17 EURANDOM workshop: *Randomness and Graphs: Processes and Structures*.  
Role: co-organiser
- 2017 Sep 4– 8 EURANDOM workshop: *YEP XIV on Networks: Probability, Combinatorics and Algorithms*. Role: co-organiser
- 2017 Aug 31–Sep 1 TU Delft: *Workshop on Advances on Epidemics in Complex Networks*.  
Role: co-organiser
- 2015 Dec 10–11 *Workshop on Algorithms and Models for the Web-graph* Role: co-organiser, editor of proceedings
- 2014 Jan 22– 24 EURANDOM workshop: *Networks with community structure* Role: co-organiser
- 2011–2012 Bi-weekly Seminar *Internet mathematics* at TU Budapest. Role: co-organiser
- 2012 Sep 25 Workshop *Fundamental Research Problems of the Future Internet* at TU Budapest  
Role:co-organiser

● INSTITUTIONAL RESPONSIBILITIES:

- 2022 – **Curriculum committee** member *DIAM, TU Delft*
- 2021 – **Organiser** of the Applied Probability/Statistics Seminar *TU Delft*
- 2014 – **Co-organiser** of the bi-weekly *Eindhoven SPOR Seminar*
- 2018 – **Coordinator/Distributor** BSc & MSc students to supervisors within Probability Group
- 2018 – **Educational mentor** of Industrial and Applied Mathematics Master students (20 students/year)

● PUBLICATIONS

Currently, I have 31 published or accepted papers, 5 preprints in review, and 1 editorship of a proceedings. My publications gather over 400 citations (Google Scholar). Here are some selected publications.

- [1] G. Odor, D. Czirfa, J. Komjáthy, L. Lovasz, and M. Karsai. “Switchover phenomenon induced by epidemic seeding on geometric networks”. *Proceedings of the National Academy of Sciences, (PNAS)*, Vol 118 (41) 118 (41) e2112607118 (2021)
- [2] J. Jorritsma, J. Komjáthy. “Distance evolutions in growing preferential attachment graphs”. *Annals of Applied Probability*, 32(6): 4356-4397 (Dec 2022)
- [3] J. Komjáthy, and B. Lodewijks. Explosion in weighted hyperbolic random graphs and geometric inhomogeneous random graphs”. *Stochastic Processes and their Applications*, Vol. 130:3, p. 1309–1367, (2020)
- [4] S. Bhamidi, J. Goodman, R.v.d. Hofstad, and J. Komjáthy. “Degree distribution of shortest path trees and bias of network sampling algorithms”. *Annals of Applied Probability* vol. 25, no. 4, p. 1780-1826. (2015)
- [5] J. Komjáthy, J. Miller, and Y. Peres. “Uniform mixing time for random walk on lamplighter graphs”. *Annales de l’Institut Henri Poincaré-Probabilités et Statistiques*, vol. 50, no. 4 p. 1140-1160 (2014)

● INVITED LECTURES: MATH CONGRESSES AND MINI-COURSES

- 2023 March **Keynote** speaker at German Probability and Statistics Days
- 2019 Sep 16–29 **Minicourse** at Summer school 2019 of *Research Training Group: High-dimensional phenomena in probability (RTG 2131)*; (8 × 45 min. lectures) Lingen, Germany
- 2017 Apr 3–8 **Minicourse** at Hausdorff School: Large random graphs: geometry and applications, (3 × 60 min. lectures, 3 × 60min problem sessions), Bonn, Germany
- 2015–2019 4 times invited speaker at **National Math Congresses** (Israeli Mathematical Union in 2016, Nederlands Mathematisch Congres in 2015, 2017, 2019)