

## Education

**Ph.D. in Statistical Physics – Eötvös Loránd University, Budapest** **Jan. 2015**  
Dept. of Phys. of Complex Systems, Advisor: Gábor Vattay

**M.Sc. in Physics – Eötvös Loránd University, Budapest** **Jun. 2009**  
Dept. of Phys. of Complex Systems, Advisor: Gábor Vattay

## Professional experience

**Assistant Professor** **2020 –**  
Central European University, Budapest, Hungary/Vienna, Austria

**Post-doctoral Researcher** **2015 – 2019**  
University of California Davis, Dept. of Computer Science, Davis, California, USA  
Principle Investigator: Raissa M. D’Souza

**Research Assistant** **2013 – 2014**  
Budapest University of Technology and Economics; Central European University, Budapest, Hungary  
Advisor: Albert-László Barabási

**Research Assistant** **2011 – 2012**  
Northeastern University, Center for Complex Network Research, Boston, Massachusetts, USA  
Advisor: Albert-László Barabási

## Selected Publications

1. **M. Pósfai**, B. Szegedy, I. Bačić, L. Blagojević, M. Abért, J Kertész, L. Lovász, A.-L. Barabási. Nat. Phys., 20, 142–149 (2024)
2. G. Pete, Á. Timár, S. Ö. Stefánsson, I. Bonamassa, **M. Pósfai**. arXiv:2306.01583 (2023)
3. M. H. Matheny, J. Emenheiser, W. Fon, A. Chapman, A. Salova, M. Rohden, J. Li, M. Hudoba de Badyn, **M. Pósfai**, L. Dueñas-Osorio, M. Mesbahi, J. P. Crutchfield, M. C. Cross, R. M. D’Souza, M. L. Roukes. Science, 363(6431):eaav7932 (2019)
4. **M. Pósfai** and R. M. D’Souza. Phys. Rev. E 98:020302(R) (2018)
5. **M. Pósfai**, J. Gao, S. P. Cornelius, A.-L. Barabási and R. M. D’Souza. Phys. Rev. E 94:032316 (2016)
6. **M. Pósfai** and P. Hövel. New J. Phys., 16:123055 (2014)
7. D. Kondor, **M. Pósfai**, I. Csabai and G. Vattay. PLoS ONE, 9(2):e86197 (2014)
8. T. Jia, Y.-Y. Liu, E. Csóka, **M. Pósfai**, J.-J. Slotine and A.-L. Barabási. Nat. Comm., 4:2002 (2013)
9. **M. Pósfai**, Y.-Y. Liu, J.-J. Slotine and A.-L. Barabási. Sci. Rep., 3:1067 (2013)
10. Y.-Y. Liu, E. Csóka, H. Zhou and **M. Pósfai\***. Phys. Rev. Lett., 109:205703 (2012)

## Books

1. A.-L. Barabási with **M. Pósfai**. Network Science, Cambridge University Press (2016)

## Selected Invited Talks

1. **M. Pósfai**. Physical networks, University of Iceland – Reykjavik, Iceland, April 2023
2. **M. Pósfai**. Physical networks, KIAS-KU International workshop: Theoretical challenges in network science – Seoul, South Korea, Sept. 2022
3. **M. Pósfai**. Emergent hierarchies and social stability, Perspectives on Complex Systems Workshop 2018 – Berlin, Germany, December 2022
4. **M. Pósfai**. Emergent hierarchies and social stability, Perspectives on Complex Systems Workshop 2018 – Berlin, Germany, December 2018
5. **M. Pósfai**. Emergent hierarchies and social stability, University of Southern California – Los Angeles, CA, September 2018
6. **M. Pósfai**. Complex Networks and Structural Controllability. Wuhan University – Wuhan, China, October 2017
7. **M. Pósfai**. Controllability of Temporal Networks and Multiplex, Multi-Timescale Networks, Dynamics On and Of Complex Networks, Satellite Meeting of NetSci 2017 – Indianapolis, IN, June 2017

## Teaching

Data Analysis and Visualization for Digital Humanities  
Scientific Python  
Network Science (Co-instructor)

CEU Winter 2023-  
CEU Fall/Winter 2020-  
UC Davis, Spring 2016, 2018