

Dániel Ábel

✉ abeld@elte.hu
PGP key id: BF435980
<http://hal.elte.hu/~abeld>

Education

- 2007– **PhD**, *Eötvös Loránd Tudományegyetem*, Budapest.
in physics, advisor: Tamás Vicsek
- 2002–2007 **Masters Degree**, *Eötvös Loránd Tudományegyetem*, Budapest.
in physics
- 1995–2002 **High School**, *Németh László Gimnázium*, Budapest.

Teaching and Work Experience

- 2012– **Instructor**, *Aquincum Institute of Technology*, lab sessions of “Structure and Dynamics of Complex Networks” course.
interactive classes teaching programming for network analysis and modeling
- 2009– **Cofounder, programmer**, *Maven Seven Network Research Ltd.*
creating on-line data collection and processing systems, user-friendly data analysis tools
- 2007–2009 **Teaching Assistant**, *Eötvös Loránd Tudományegyetem*.
in undergraduate lab: supervising student experiments, grading lab reports

Languages

Hungarian **native**
English **fluent**
German **basic**

TELC B1 certificate

Publications

Bence Ferdinandy, Kunal Bhattacharya, Dániel Ábel, and Tamás Vicsek. *Landing together: How flocks arrive at a coherent action in time and space in the presence of perturbations*. *Physica A*, 391(4):1207–1215, 2012

Norbert Tarcai, Csaba Virágh, Dániel Ábel, Máté Nagy, Péter L Várkonyi, Gábor Vásárhelyi, and Tamás Vicsek. *Patterns, transitions and the role of leaders in the collective dynamics of a simple robotic flock*. *Journal of Statistical Mechanics: Theory and Experiment*, 2011(04):P04010, 2011

Anna Lázár, Dániel Ábel, and Tamás Vicsek. *Modularity measure of networks with overlapping communities*. *Europhysics Letters*, 90:18001, 2010. (Awarded 2nd prize for “best paper” award at ECCS 2010)

Dániel Ábel. *Tracking the movement of hundreds of bacteria*. 2009. Paper presented at KÉPAF 2009

Gergely Palla, Dániel Ábel, Illés J. Farkas, Péter Pollner, Imre Derényi, and Tamás Vicsek. *k-clique Percolation and Clustering*, chapter 9, pages 369–408. Springer, 2009. ISBN: 978-3-540-69394-9

Gergely Palla, Péter Pollner, Illés J. Farkas, Imre Derényi, Dániel Ábel, András Vicsek, and Tamás Vicsek. *Centrality properties of directed module members in social networks..* *Physica A*, 387(19-20):4959–4966, 2008. <http://arxiv.org/abs/0809.0669>

Dániel Ábel, Péter Pollner, András Vicsek, Gergely Palla, and Tamás Vicsek. *A real-world hierarchical social network: a case-study of a large european company*. 2008. Poster presented at NetSci 2008

Dániel Ábel, Gergely Palla, Illés J. Farkas, Imre Derényi, Péter Pollner, and Tamás Vicsek. *Cfinder: efficient module finder in directed, undirected and weighted networks*. 2007. Poster presented at ECCS 2007

Dániel Ábel. *Komplex hálózatok átfedő csoportosulásainak vizsgálata*, 2007. Master's thesis, in hungarian; title in english: Investigating overlapping communities of complex networks

Illés J. Farkas, Gergely Palla, Dániel Ábel, and Tamás Vicsek. *Weighted network modules*. *New Journal of Physics*, 9(6):180, 2007. <http://arxiv.org/abs/cond-mat/0703706>

Other

- co-founder of maven7 (<http://maven7.hu>), a startup company applying complex networks in sociometry, marketing and business.
- Python, C/C++, Java programming experience
- webapplication development experience (Django, Javascript, SQL)
- some experience with administrating Ubuntu and Debian GNU/Linux systems
- Student participant in Google Summer of Code 2008 (working on Cytoscape, mentor organization: GenMAPP)
- Mentor in Google Summer of Code 2009 (mentor organization: GenMAPP)
- Cytoscape core developer