

## CV of János Török

### Personal data

Name	János Török
Position	Associate professor
Current institution	Department of Theoretical Physics, Budapest University of Technology and Economics H-1111 Budapest, Budafoki út 8, Hungary
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Phone	+36 1 463 41 07
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Date of birth	1972

### Education

1996	MSc in Physics, Eötvös University Budapest
1997	MSc as French scientific translator, Eötvös University Budapest
1997	DEA de Dynamique des Fluides et des Transferts, Paris VI-Paris Sud
2000	PhD in Physics ("Shearing of granular materials") Budapest University of Technology and Economics

### Employment

2012-	Associate professor	Department of Theoretical Physics, BME
2009-2011	Postdoctoral researcher	Computational and Statistical Physics Group, University Duisburg-Essen
2006-2009	Expert	Centre of Information Technology, BME
2003, 2005	Assistant professor	Department of Chemical Information Technology, BME
2004, 2006	Postdoctoral researcher	Computational and Statistical Physics Group, University Duisburg-Essen
2001-2002	Postdoctoral researcher	Department of Theoretical Physics, BME
2000-2001	Postdoctoral researcher	Weizmann Institute of Science, Israel

### Awards and prizes

2014	'Teaching Excellence' award, (Faculty of Sciences, BME)
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### Research interest

- Rheology of dry granular materials: theory of quasistatic shear, effect of particle shape,

- critical state concept
- Social networks: modeling society, big data analysis
- Opinion models

### Teaching activity

- Theoretical Physics I, II (Mechanics, Electrodynamics, Quantum mechanics, Statistical physics)
- Computer simulations in statistical physics
- Vector calculus

### Students supervised

- MSc students: Alexandra Nagy (2015)

### Memberships and professional service

- Member of ELFT
- Referee of Physical Review, Entropy, JSTAT
- (2013) Member of the physics jury of the Hungarian National Science Foundation, OTKA

### Grants, fellowships, projects

2004-2007	OTKA F47259 (2m Ft) Principal investigator
2000-2001	Fellowship of the Feinberg Graduate School
1995-1999	Fellowship of the French government

### Invited talks

2012	Committee for new railway construction standards (Hungary)
2008	Laboratoire de Physique de la Matière Condensée et des Nanostructures, Lyon
2004	Institut für Festkörperforschung, Forschungszentrum Jülich

### Languages

English (master), French (master), German (intermediate)

## Scientific impact (as of 25/03/2015)

26 papers in refereed journals

Total number of citations: 384

H-index: 10

Complete list of publications: <https://vm.mtmt.hu//search/slist.php?AuthorID=10011175>

## Five selected publications

1. J Török, G Iñiguez, T Yasseri, MS Miguel, K Kaski, J Kertész, *Opinions, Conflicts and Consensus: Modeling Social Dynamics in a Collaborative Environment*, Physical Review Letters **110**, 088701 (2013).
2. J Török, T Unger, J Kertész, DE Wolf, *Shear zones in granular materials: Optimization in a self-organized random potential* Physical Review E **75**, 011305 (2007).
3. J Török, *Analytic study of clustering in shaken granular material using zero-range processes*, Physica A: Statistical Mechanics and its Applications **355**, 374-382 (2005).
4. T Unger, J Török, J Kertész, DE Wolf, *Shear band formation in granular media as a variational problem*, Physical Review Letters **89**, 214301 (2004).
5. Y Kafri, E Levine, D Mukamel, GM Schütz, J Török, *Criterion for phase separation in one-dimensional driven systems*, Physical Review Letters **89**, 35702 (2002).