CURRICULUM VITAE FOR DAVID ANDREW HEAD

PERSONAL DETAILS

Name:	Dr. David Andrew Head
Date of birth:	23/05/72
Place of birth:	Tonbridge, Kent, UK
Nationality:	British
Sex:	Male
Electronic mail:	david@rheo.t.u-tokyo.ac.jp
Home page:	rheo.t.u-tokyo.ac.jp/~david/index.html
Foreign languages:	French (basic), Dutch (basic), Japanese (JLPT level 4 [score 383/400]; currently around level 3 [will take exam in Dec. 2006])
Computer languages	C, C++, Pascal, FORTRAN, BASIC, Assembly, Python
Current work address:	Doi Laboratory, Department of Applied Physics, School of Engineering, The University of Tokyo, 319 Kougaku-bu 6 Gou-kan, Hongo 7-3-1, Bunkyo-ku, Tokyo, JAPAN. Tel. & Fax. : +81-3-5841-6821

UNIVERSITY EDUCATION

Start	End	Institution	Qualification	Grade	Date of award
10/90	06/93	Cambridge University	MA Hons	2–1	22/03/97
10/93	06/94	DAMTP, Cambridge University	Part III Maths	Pass (Merit)	27/07/94
10/95	09/98	Faculty of Science, Brunel University	PhD		20/07/99

RESEARCH POSITIONS HELD

Start	End	Institution	Position
01/01/99	31/12/01	Department of Physics and Astronomy, University of Edinburgh	EPSRC Postdoctoral Fellowship in Mathematics and Physics (No. GR/M09674)
01/01/02	31/12/02	Division of Physics and Astronomy, Vrije Universiteit	onderzoeker ('Research assistant')
01/01/03	31/0/04	Division of Physics and Astronomy, Vrije Universiteit	Marie Curie Fellow (HPMF-CT-2002-01932)
01/10/04	31/9/06	Department of Applied Physics, University of Tokyo	JSPS Fellow (P04727)

RELATED WORK EXPERIENCE

Year	Place	Description	Type	Hours
1996	Department of Physics, Brunel University	Demonstrator	Part-time	1pw, 10wks
1997	*ibid*	Demonstrator	Part-time	2pw, 10wks
1998	IPES, Brunel University	Demonstrator	Part-time	2pw, 16wks
1999	Department of Physics and Astronomy, Edinburgh University	Tutor	Voluntary	2pw, 11wks
2000	*ibid*	Tutor	Voluntary	2pw, 11wks
2001	*ibid*	Tutor	Voluntary	2pw, 12wks

NOTEWORTHY ORAL PRESENTATIONS

Date	Conference	Type
12/96	CMMP, York, UK	Invited
10/11/99	Tohwa StatPhys, Fukuoka, Japan	Contributed
24/01/00	SPHINX ESF Meeting, Les Houches, France	Contributed
17/07/01	StatPhys 2001, Cancun, Mexico	Contributed
4/10/01	Granular Matter Symposium, Nigmegen, Netherlands	Contributed
6/2/02	Landelijk Seminarium Statistiche Mechanica, Leiden, Netherlands	Invited
28/1/04	Statistical Mechanics Symposium, Lunteren, Netherlands	Contributed
4/3/04	Programme: "Statistical Mechanics of Molecular and Cellular Biological Systems," Newton Institute, Cambridge, UK	Invited
7/4/05	Programme: "Granular Physics", KITP, Santa Barbara, US	Invited
22/6/05	BioRheo Symposium, The University of Tokyo, Japan	Invited
28/07/05	International Polymer Congress, Kyoto, Japan	Contributed
11/4/06	Deformation, Yield and Fracture of Polymers, Kerkrade, The Netherlands	Contributed
6/7/06	IWMMCOF2006 Complex Fluids Workshop, Prato, Italy	Contributed

Informal talks to research groups have been omitted; these typically make up 3-4 per year

PUBLICATIONS LIST (non–peer reviewed publications listed separately)

Given in reverse chronological order; correct as of September 18, 2006.

• *"Volume-controlled buckling of thin elastic shells: application to crusts formed on evaporating partially wetted droplets,"* D.A. Head, J. Phys.: Cond. Mat. **18**, L485 (2006).

• *"Modeling the elastic deformation of polymer crusts formed by sessile droplet evaporation,"* D.A. Head, Phys. Rev. E **74**, 021601 (2006).

• *"The mechanical response of semiflexible polymer gels to localized perturbations"*, D.A. Head, A.J. Levine and F.C. MacKintosh, Phys. Rev. E **72**, 061914 (2005).

• *"A mean field description of jamming in non–cohesive frictionless particulate systems"*, D.A. Head, Phys. Rev. E **72**, 021303 (2005).

• *"First order rigidity transition and multiple stability regimes for random networks with internal stresses"*, D.A. Head, J. Phys. A **37**, 10771 (2004).

• *"Distinct regimes of elastic response and deformation modes of cross–linked cytoskeletal and semiflexible polymer networks"*, D.A. Head, A.J. Levine and F.C. MacKintosh, Phys. Rev. E **68**, 061907 (2003).

• *"Deformation of semiflexible polymer networks"*, D.A. Head, A.J. Levine and F.C. MacKintosh, Phys. Rev. Lett. **91**, 108102 (2003).

• *"Non-universality of elastic exponents in random bond-bending networks"*, D.A. Head, F.C. MacKintosh and A.J. Levine, Phys. Rev. E **68**, 025101(R) (2003).

• *"Anomalous force diffusion in nearly-ordered packings of frictionless discs"*, D.A. Head, J. Phys. A **36**, 6923 (2003).

• *"Rheological chaos in a Scalar Shear-Thickening Model"*, M.E. Cates, D.A. Head and A. Ajdari, Phys. Rev. E **66**, 025202(R) (2002).

• *"Universal persistence exponents in an extremally driven system"*, D. A. Head, Phys. Rev. E **65**, 027104 (2002).

• *"Rheological instability in a simple shear thickening model"*, D. A. Head, A. Ajdari and M. E. Cates, Euro. Phys. Lett. **57**, 120 (2002).

• *"Jamming, hysteresis and oscillation in scalar models for shear thickening"*, D. A. Head, A. Ajdari and M. E. Cates, Phys. Rev. E **64**, 061509 (2001).

• *"Robust propagation direction of stresses in a minimal granular packing"*, D. A. Head, A. V. Tkachenko and T. A. Witten, Eur. Phys. J. E **6**, 99 (2001).

• *"Extremal driving as a mechanism for generating long-term memory"*, D. A. Head, J.

Phys. A **33**, L387 (2000).

• *"Temperature scaling, glassiness and stationarity in the Bak-Sneppen model"*, D. A. Head, Euro. Phys. J. B **17**, 289 (2000).

• *"Phenomenological glass model for vibratory granular compaction"*, D. A. Head, Phys. Rev. E **62**, 2439 (2000).

• *"Zero-temperature criticality in a simple glass model"*, D. A. Head, J. Phys. A **33**, 465 (2000).

• *"Stretched exponentials and power laws in granular avalanching"*, D. A. Head and G. J. Rodgers, J. Phys. A **32**, 1387 (1999).

• *"The anisotropic Bak-Sneppen model"*, D. A. Head and G. J. Rodgers, J. Phys. A **31**, 3977 (1998).

• *"A coarse grained model of granular compaction and relaxation"*, D. A. Head and G. J. Rodgers, J. Phys. A **31**, 107 (1998).

• *"Slowly driven sandpile formation with granular mixtures"*, D. A. Head and G. J. Rodgers, Phys. Rev. E **56**, 1976 (1997).

• *"Speciation and extinction in a simple model of evolution"*, D. A. Head and G. J. Rodgers, Phys. Rev. E **55**, 3312 (1997), also *adap-org/9611003* (improved version).

• *"Crossover to self-organised criticality in an inertial sandpile model"*, D. A. Head and G. J. Rodgers, Phys. Rev. E **55**, 2573 (1997).

• *"Kinetics of catalysis with surface disorder"*, D. A. Head and G. J. Rodgers, Phys. Rev. E **54**, 1101 (1996).

Non-peer reviewed publications:

• *"Deformation of crosslinked semiflexible polymer networks"*, D.A. Head, A.J. Levine and F.C. MacKintosh, in Slow Dynamics in Complex Systems eds. M. Tokuyama and I. Oppenheim (AIP, New York, 2004).

• *"Reply to comment of J.N Roux"*, D. A. Head, A. K. Tkachenko and T. A. Witten, Euro. Phys. J. E **7**, 299 (2002).

• *"Critical and glass transitions in a simple model of activated processes"*, D. A. Head, in Statistical physics: Third Tohwa University International Conference eds. M. Yokuyama and H. E. Stanley (AIP, New York, 2000).