Address: Rudolf Peierls Centre for Theoretical Physics, 1 Keble Road, Oxford OX1 3NP, UK Telephone: 44 (0)1865 273992 Fax: 44 (0)1865 273947 Email: julia.yeomans@physics.ox.ac.uk Home page: http://www-thphys.physics.ox.ac.uk/people/JuliaYeomans Nationality: British Family: Married, 4 daughters

### Qualifications:

Diploma, Teaching and Learning in Higher Education (Oxford University) 2000.D. Phil.Thesis, Critical Phenomena of Disordered Systems (Oxford University) 1979.B.A. Physics, First class honours (Oxford University), 1976.

#### Positions held:

- 2002 Professor of Physics, University of Oxford
- 1998 02 Reader in Physics, University of Oxford
- 1995 98 University Lecturer, University of Oxford
- 1983 Pauline Chan Fellow and Tutor in Physics, St. Hilda's College, Oxford
- 1981 83 Lecturer, Department of Physics, Southampton University
- 1979 81 Postdoctoral Research Associate, Cornell University, USA

#### Visiting positions:

- 2014 Kavli Institute for Theoretical Physics, Santa Barbara, USA
- 2013 Visiting Fellowship, Newton Institute, Cambridge
- 2011 Visiting Professor, Enhanced Education Programme, University of Kyushu, Japan
- 1995 Visiting Professor, University of Padua, Italy
- 1992 Visiting Professor, Catholic University of Leuven

### **Distinctions:**

Ehrenfest Colloquium, Leiden, 2017

Vice Chair, Gordon Conference on Complex Active and Adaptive Matter, California, 2017
Guest of Honor, 115th Statistical Physics Conference, Rutgers, 2016
Elected Fellow of the Royal Society, 2013
3rd EPJE-de Gennes Prize lecture, 2013
ERC Advanced Grant, 2012–17
University of Oxford Teaching Award, 2008
Inaugural CMMS Distinguished Lecturer, University of Pittsburgh, 2007
EPSRC Advanced Fellowship, 1990-95
Scott Prize, Oxford University, 1976

# Invited/plenary lectures at major international meetings:

- Jun 2017 Gordon Conference, Microfluidics, Tuscany
- Apr 2017 Materials Research Society Spring Meeting, Arizona
- Jun 2016 Keynote lecture, 3rd international symposium on Micro- and Nanomachines, Hannover
- Mar 2016 American Physical Society, March Meeting
- Sept 2015 European conference on liquid crystals, Manchester
- Jun 2015 Gordon Research Conference, Liquid crystals, Maine
- Jan 2015 Gordon Conference, Micro and Nanoscale phase change, Texas
- July 2014 Plenary lecture, Liquids 2014, Lisbon
- Feb 2014 Keynote lecture, Dutch National Meeting for chemistry of physics and materials
- Sept 2013 Plenary lecture, 3rd International Soft Matter Conference, Rome.

- Aug 2013 Gordon Conference, Soft Condensed Matter, New England.
- July 2013 Statphys 25, Seoul, Republic of Korea.
- Nov 2012 Materials Research Society Fall Meeting, Boston.
- Oct 2012 Plenary, 1st International Conference on Numerical Physics, Oran, Algeria.
- Jan 2011 Plenary lecture, XL Winter Meeting on Statistical Physics, Mexico.
- Sept 2010 Plenary lecture, 23rd General Conference EPS Condensed Matter Division, Poland.
- July 2010 23rd International Liquid Crystal Conference, Poland.
- June 2009 Emergence in Chemical Systems, Alaska.
- June 2009 Gordon Conference, Liquid Crystals, New England.
- Dec 2008 100th Statistical Mechanics Conference, Rutgers, USA.
- Sept 2007 Conference on Computational Physics, Brussels.
- Sept 2006 ESF Research Conference, Complex Fluid Interfaces, Austria.
- Apr 2006 Multiscale Modeling: Electrons, Molecules and (Bio)materials, Royal Netherlands Academy of Arts and S
- July 2004 Statphys 22, Bangalore, India.
- Sept 2001 Conference on Computational Physics, Germany.
- Aug 2001 Gordon Conference, Liquids, New England.
- Mar 1999 Division of Computational Physics, Centennial APS Meeting, Atlanta.
- Aug 1996 Gordon Conference, Modelling Flow in Permeable Media, New England.

#### Invited lectures at schools:

- Mar 2017 Geilo school, Physics inspired by living matter, Norway.
- Aug 2016 Nonequilibrium statistical physics & active matter systems school and workshop, Beijing
- July 2016 European Summer School on the Physics of Living Matter, Strasbourg
- July 2015 Soft matter self assembly, Varenna summer school
- Mar 2015 Geilo school, Cooperative Particles, Norway.
- July 2014 From molecules to systems, Physics of Life summer school, Lancaster.
- June 2014 Summer School on Active Systems, Korea
- Mar 2013 Geilo School, Soft Matter Confinement, Norway
- Sept 2005 Fundamental Problems in Statistical Physics XI, Belgium.

#### Other invited lectures at international meetings (last 5 years):

- July 2017 Workshop on new frontiers in colloid science, Birmingham
- July 2017 Biologically active fluids, Birmingham
- Mar 2017 Microswimmers, self-propelled particles and active matter, CECAM
- Jan 2017 COST: Flowing matter, Porto
- Oct 2016 PhysBio2016, Paris
- Oct 2016 International workshop on Soft and Complex Matter, Norwegian Academy of Science and Letters, Oslo
- Oct 2016 Fluctuations in small complex systems, Venice
- Apr 2016 From Cells to Organisms, Ascona, Switzerland
- Feb 2016 MECO 41, Vienna
- Jan 2016 Understanding the Physics of Life, London
- Dec 2015 International workshop: Challenges in statistical mechanics, London
- Nov 2015 Symposium on Biological Physics and Soft Matter, Weizmann Inst., Israel
- Oct 2015 Women in applied maths and soft matter physics, Mainz
- Oct 2015 8th International liquid crystal elastomer conference, Erice, Italy
- Sept 2015 Italian national conference on condensed matter physics, Palermo
- Sept 2015 Distruc, Heraklion, Crete
- May 2015 Physics of active matter, Suxhou, China
- May 2015 Connecting microfluidics with oceanography, Okinawa, Japan
- Feb 2015 Complex liquids at structured surfaces, Berlin.
- Oct 2014 Venice meeting on Fluctuations in Small Complex Systems.
- Sept 2014 Physics meets Biology, Oxford.
- July 2014 Discrete simulation of fluid dynamics, Paris.

- Mar 2014 555th Heraeus Seminar, Bonn
- Jan 2014 Journees de Physique Statistique, Paris
- Dec 2013 Materials Research Society Fall Meeting, Boston
- Nov 2013 TRANSCEND, Guildford
- Sept 2013 Diffuse Interface Models, DIMO 2013, Italy
- June 2013 Liquid crystals, Cambridge
- Feb 2013 Wetting and Capillarity in Complex Systems, Dresden.
- Oct 2012 Fisher Symposium, Maryland.
- Oct 2012 Complex Liquids at Structured Surfaces, Lisbon.
- Oct 2012 Fluctuations in Small Complex Systems, Venice.
- Sept 2012 Nonequilibrium Collective Dynamics, Potsdam.
- Mar 2012 8th Zsigmondy Colloquium, Darmstadt.
- Feb 2012 Phase Transition Dynamics in Soft Matter, Kyoto.

57 invited lectures in the years 2003 - 2011

### Recent seminars and colloquia

2017: Computational Biology, Oxford; Curie Institute, Paris

2016: Durham, Oxford University PhysSoc, Ljubljana, SIAM student chapter, Oxford; Stoner colloquium, Leeds 2015: University College, London, physics colloquium; UCL chemistry; Warwick; Bath; Gottingen

2014: Royal Holloway; Open University; Institut Curie; KITP; Cambridge; Twente; Rutherford-Appleton Lab; Frohlich colloquium; Liverpool; Queen Mary, University of London

2013: Wuhan, China; MIT colloquium; colloquium, University of Surrey; University of Coventry, University of Liverpool colloquium

2012: Amsterdam; Birmingham; Bristol; Durham; Imperial College; University of Tokyo

### Recent major grants (as PI or co-PI):

- 2017 19 Royal Society International Exchange (with Taiwan) 12K
- 2017 18 BBSRC Priming Food Partnerships: Modelling Digestion (Oxford PI) 78K
- 2017-19 HORIZON 2020 ITN LUBISS (Oxford PI)
- 2016-18 EU Marie Curie: GelSwimming, 2 year PDRA (Andreas Zoettl)
- 2015-18 HORIZON 2020 ITN DISTRUC (co-PI)
- 2015-18 HORIZON 2020, FETOPEN: ABIOMATER 600K (Oxford node)
- 2014-16 EMBO Fellowship, 2 year PDRA (Tyler Shendruk)
- 2012-17 ERC Advanced Grant, 1.5M
- 2010-12 EU Marie Curie: Microenvs, 2 year PDRA (Rodrigo Ledesma)
- 2008-12 EU Marie Curie: Actoids, 2 year PDRA (Miha Ravnik)
- 2007-10 Behaviour of Fluids at the Microscale, ONR, USA £321K
- 2006-09 Oxford Condensed Matter Theory Programme Grant, EPSRC 1.85M
- 2005-08 INFLUS: EU STREP, Interfacial Phenomena in Materials, 103K
- 2003-04 Modelling lubrication at mesoscopic length scales, ONR, USA £240K

### Recent advisory appointments

- 2017 Chair, International Scientific Advisory Committee, SISSA
- 2015 –16 Rapporteur, Max Plank Research Fields Evaluation
- 2016 Scientific steering committee, Partnership for Advanced Computing in Europe
- 2016 CECAM: Appointment committee for Director
- 2015 SAAC review of Soft Matter, Weizmann Institute
- 2015 Advisory Board, International Iberian Nanotechnology Laboratory
- 2015 Vice Chair, IUPAP Commission on Statistical Physics
- 2015 CECAM, Scientific Advisory Committee
- 2013 University of Padua, Evaluation Committee
- 2013 –15 Nat. Sci. & Eng. Research Council of Canada (NSERC) Physics Evaluation Group

Nordita Scientific Program Committee
Board of Electors, Professorship of Materials Science, Cambridge
Audit Committee, Ecole Polytechnique Federale de Lausanne
Chair, Panel V, University of Tampere Research Assessment Exercise
ERC Starting/Consolodator Grants Evaluation Panel
Academy of Finland, Computational Science Research Programme Panel
Nordita, Professorial Appointment, International Expert
Helsinki University, Professorial Appointment, International Expert
University of Geneva, Professorial Appointment, International Expert

#### Learned Societies, etc. service:

- 2015 17 Chair, Royal Society Sectional Committee 2
- 2015 Royal Society Awards Committee, Side A
- 2016 Chair, EPSRC Physical Sciences Prioritisation Panel
- 2016 Royal Society-Leverhulme Trust Senior Research Fellowships Panel
- 2015 Royal Society Summer Science Exhibition Committee
- 2014 Institute of Physics, Awards Committee
- 2013 Royal Society, Newton Advanced Fellowships Committee
- 2011 Royal Society, Sectional Committee 2
- 2010 IUPAP Commission C3 (Statistical Physics)
- 2009 Council, European Physical Society
- 2008 Board member, EPS Division of Physics in the Life Sciences
- 2007– Expert Evaluator Panel, EU FP7 Programme, Interface Modelling
- 2001 External advisor, EPSRC NTU Platform Grant (P.I. Prof. G. McHale)

### **Editorial appointments:**

Editorial Board, Phil. Trans. A (2016–); Guest Editor, Journal of Physics: Condensed Matter special issue *Fluids at Structured Surfaces (2016);* Editor, Phys. Rev. E (2014–), Advisory Editor, Europhysics Letters (2006–09); Co-Editor, Europhysics Letters (2003–06); Editorial Board, Journal of Statistical Physics (2001–4 and 2015–); Editorial Board, Physica A (1999–01); Editorial Board, Journal of Physics A: Math. Gen. (1995–99); Editor, Cambridge Lecture Notes in Physics (1993–2003).

### Conference organising:

Organiser: CECAM workshop on Cell and Tissue Mobility (2017); Session organiser: 19th IUPAB conference, Edinburgh (2017); Advisory Board, Fundamental Problems in Statistical Physics School 2016; Programme Committee, International Soft Matter Conference 2016; Organiser: Swimming and Complexity at Low Reynolds Number, Institute of Physics Topical Research Meeting (2012), Organising Committee: Playing Colloidal Mikado, Oxford (2009), Luxembourg (2010); Mesoscale Modelling for Complex Fluids and Flows, Oxford (2007); Mesoscopic Simulation of Liquids, CECAM, Lyons (1999); DSFD, Santa Fe (2000); Tokyo (1999, Chair); Oxford (1998). International Advisory Committee: Liquids (2017), CMD24, (2012), SigmaPhi (2008–), STATPHYS (2007–); Conference on Computational Physics (2007–); Computational Modelling and Simulation of Materials (2004).

#### Outreach:

- 2017 Lecture, Portsmouth and District Physical Society
- Institute of Physics, Berkshire, Branch lecture Merseyside, Manchester, Hereford and Worcester, Alderma
   Institute of Physics, London and SE Branch lecture.
- 2015 Lecture, Wykeham Abbey School
- 2014 Chair, Think Physics Advisory Committee
- 2013 Institute of Physics, South-Central Branch lecture.
- 2012 Institute of Physics, Non-linear Physics Group Christmas lecture.

2009 - 11	Lead exhibitor, Nature's Raincoats, RS Summer Science Exhibition. Techfest, Mumbai;
	Oxfordshire Science Festival; Cheltenham Science Festival.
2008 - 11	Judging Panel: IoP Women in Physics Group Very Early Career Award.
2007,09,11	SET for Britain, Judge.
2006	Leader, UK delegation, 2nd IUPAP Conference, Women in Physics.
2006 -	Advisory Panel of the Institute of Physics Women in Physics Group.

## University teaching and administration:

College: from 1983: Senior Physics Tutor at St Hilda's College, running a school of ~20 undergraduates. 6 hours per week tutorials, admissions, Governing Body, Tutorial Committee, Dean (3 years), Senior Tutor (1 year), Acting Tutor for Graduates (1 year), Finance Committee (3 years), Investment Committee (3 years), Academic Committee (3 years), Development Committee (3 years), many ad hoc minor committees.

Recent lecturing:		
Recent lecturing.	2015 -	Fluids, Flows and Complexity, 16 lectures (year 3) (nominated for the MPLS most acclaimed lecturer award)
	2015 -	Soft Matter Physics, 8 lectures (MMathPhys)
	2015 -	Topics in Soft and Active Matter Physics, reading course (MMathPhys)
	2012 - 2014	Complex Numbers and Differential Equations, 10 lectures (year 1)
	2009 - 2011	Electromagnetism, 20 lectures (year 2)
	2004 - 2008	Calculus, 11 lectures (year 1)
	alternate years	Soft Matter Physics, 8 lectures (graduate)
Recent committees:		

	2014, 15	Recognition of Distinction Panel
	2014	Chair, Physics and Philosophy Examiners
	2012 - 2014	Physics Schools Examiner
	2016 -	Committee to review the third year syllabus
	2014 -	CL2 user panel
	2010 -	Higher Studies Fund
	2010 - 13	Sub-departmental computing committee
External examinir	ng:	
	2015 -	Physics Parts II and III, University of Cambridge
	2012 - 14	Physics, University of Southampton
	2009 - 11	Physics and Mathematical Physics, University of Warwick

Graduate supervision:

33 graduate students who have completed their D. Phil.; 4 current graduate students.