September 6th, 2024

Address: Rudolf Peierls Centre for Theoretical Physics, Clarendon Lab., Parks Rd., Oxford OX1 3PU

Tel: 44 (0)1865 273992 Email: julia.yeomans@physics.ox.ac.uk Home page: http://www2.physics.ox.ac.uk/contacts/people/yeomans ORCID: https://orcid.org/0000-0001-8268-5469

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 1979.

B.A. Physics, First class honours & Scott prize 1976.

#### **Positions held:**

- 2023 Chevron Chair Professor, IIT Madras
- 2020 23 Head of the Rudolf Peierls Centre for Theoretical Physics
- 2020 Simons Visiting Professor, Niels Bohr International Academy, University of Copenhagen
- 2019 20 Vice Principal, St. Hilda's College, Oxford
- 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
- 2002 Professor of Physics, University of Oxford
- 1998 02 Reader in Physics, University of Oxford
- 1995 Visiting Professor, University of Padua, Italy
- 1995 98 University Lecturer, University of Oxford
- 1992 Visiting Professor, Catholic University of Leuven
- 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

### Distinctions:

EPS-CMD Liquid Matter Prize, 2024

Appointed Officer of the Order of the British Empire (OBE), 2024

ERC Advanced Grant (funded as Frontier Grant by UKRI), 2024-29

Ben Sturgeon Lectureship, British Liquid Crystal Society, 2024

Dorothy Hodgkin Memorial Lecture, Somerville College, Oxford, 2023

- Raymond and Beverly Sackler Distinguished Lecture, Niels Bohr Institute, Copenhagen, 2023
- Honorary Fellowship, Somerville College, Oxford, 2022
- Aditi Simha Memorial Lecture, Bangalore, 2022

Sam Edwards Medal and Prize, 2021

Lennard Jones Prize and Lectureship, 2021

Honorary Degree, University of Northumbria, 2019

Annual Edward Delaval Lecture in Physics, Lincoln, 2019

Chair, Gordon Conference on Complex Active and Adaptive Matter, California, 2019

Professorial Distinction Award, Level 5, 2018

Ehrenfest Colloquium, Leiden, 2017

PS Narayanan Memorial Lecture, Department of Physics at IISc Bangalore, 2017

Guest of Honour, 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

## Selected recent advisory and committee appointments:

- 2024 ERC Advanced Grants Evaluation Panel
- 2024 Review Team, School of Physics, Trinity College, Dublin
- 2024 External Member, appointment of Head of School of Physics, University of Edinburgh
- 2023 Jury, Blavatnik Awards for young scientists in the UK
- 2023 Royal Society Sectional Committee 2
- 2023 External Member, W2 Professorship Appointment Committee, University of Oldenburg
- 2023 External Member, School of Physical Sciences Academic Career Pathway Committee, Cambridge
- 2022 Electoral Board, 1920 Professor of Physical Chemistry, Cambridge
- 2022 Swiss Advanced Grants Evaluation Panel
- 2020 Chair, Royal Society Research Appointment Panel A(iii)
- 2020–24 British Liquid Crystal Society, Awards Committee
- 2020 21 International Jury, Austria Science Fund, 1,000 ideas programme
- 2020 24 Committee for Natural and Technical Sciences, Novo Nordisk Foundation
- 2019 Royal Society International Exchanges Panel
- 2020, 2024 Physical Sciences Panel, Hong Kong RAE
- 2018 21 Council, Royal Society
- 2018 20 Royal Society FLAIR Fellowship Panel
- 2017, 2018 Research Council of Norway Panel
- 2018 Professorial Evaluation Committee, University of Trondheim
- 2017, 2021 Chair, International Scientific Advisory Committee, SISSA, Italy
- 2016 18  $\,$  Royal Society Leverhulme Trust Senior Research Fellowship Panel
- $2016-18 \qquad {\rm Scientific\ Steering\ Committee,\ Partnership\ for\ Advanced\ Computing\ in\ Europe}$
- 2016 Search Committee, CECAM Director
- 2015 18 Royal Society Summer Science Exhibition Committee
- 2015 17 Chair, Royal Society Sectional Committee 2
- 2015 17 Royal Society Awards Committee, Side A
- 2015 16 Rapporteur, Max Plank Research Fields Evaluation
- 2015 SAAC review of Soft Matter, Weizmann Institute
- 2015 18 Vice Chair, IUPAP Commission on Statistical Physics
- 2015 20 CECAM, Scientific Advisory Committee
- 2009 13 Council, European Physical Society

Keynote/plenary lectures at major international meetings: (from > 100 invited conference talks):

- Sept 2024 Prize lecture, 12th Liquid Matter Conference, Mainz
- July 2024 Plenary lecture, 29th International Liquid Crystal Conference, Rio de Janeiro
- July 2024 Keynote lecture, 8th International Soft Matter Conference, Rayleigh, USA
- June 2024 10th Bifurcations and Instabilities in Fluid Dynamics meeting, Edinburgh
- Sept 2023 Keynote talk, Indian conference on micro and nanofluidics, Chennai
- Sept 2023 Frontiers in Physics of Soft and Biological Matter, Bangalore
- Aug 2023 Bohr 100, centennial celebrations, Copenhagen
- Aug 2023 European Biophysical Society meeting, Stockholm
- July 2023 Keynote talk, International Meeting on Wetting and Carbon Neutralisation, London
- May 2023 Plenary lecture, XXVII Sitges Conference on Statistical Mechanics
- Feb 2023 Collective Cell Migration Workshop, Sussex
- Sept 2022 27th Thermodynamics Conference, Bath
- Aug 2022 Active Matter: the next 25 years, Lorentz Center, Leiden
- Sept 2022 Plenary lecture, Italian Soft Days, Bari
- May 2022 Plenary lecture, Softcomp, Salerno
- April 2022 Plenary lecture, British Applied Mathematics Colloquium
- Nov 2021 Argentinian XVI Meeting on Recent Advances in Physics of Fluids and its Applications
- June 2021 Granada Seminar on Computational and Statistical Physics
- Sept 2020 Plenary lecture, Computer Simulations in Physics and Beyond, Moscow (on-line)
- Oct 2019 Plenary lecture, Italian National Conference on the Physics of Matter, Sicily
- Sept 2019 Plenary lecture, CECAM 50th Anniversary Meeting, Lausanne
- July 2019  $\,$  Gordon Conference, Liquid Crystals, New Hampshire  $\,$
- April 2019 Plenary lecture, CMD German Physical Society
- Dec 2018 Plenary lecture, Australian Institute of Physics Congress

- July 2018 Plenary lecture, CCP2018, California
- Jan 2018 Plenary lecture, Physics@Veldhoven (Dutch National Meeting)
- 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 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 and Physics of 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

#### Selected invited lectures at Schools:

- Oct 2024 School and Workshop on Active Matter, ICTP-SAIFR, Brazil
- Aug 2024 Summer School, Non-equilibrium processes in physics and biology, Vienna
- July 2024 Boulder School, Self-organizing matter: from animate to the inanimate
- Jan 2023 Nordita Condensed Matter PhD Winter School
- July 2022 Boulder School, Hydrodynamics Across Scales
- Mar 2022 Geilo School, The Physics of Evolving Matter: Memory, Learning and Evolution
- June 2021 Complex Fluids and Soft Solids, UMass, Amherst
- Sept 2021 Theoretical Methods for Active Matter
- July 2021 Advanced School in Soft Condensed Matter Solutions in the Summer 2021
- Mar 2020 ICTP-SAIFR/Bio2020, Brazil
- Sept 2019 New Developments in Topological Condensed Matter Physics, Les Houches, France
- Aug 2019 Complex Motion in Fluids, Denmark
- Feb 2019 Motile Active Matter: Nanomachines, Microswimmers, and Swarms, Julich, Germany
- Nov 2018 LuBISS school, Mainz
- July 2018 Fluids, London
- Apr 2018 Particles, Active Matter, Confinement and Viscoelasticity: the microfluidics playground, NaplesMar 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

### Recent seminars and colloquia:

2024: Rutgers (on-line)

2023: Coventry; University College London; Colloquium, Bristol; Colloquium, Dresden; Colloquium, IIT Madras; Leipzig; colloquium, Chennai

2022: Harvard; Heidelberg; ESPCI, Paris; IIT, Bombay; Cambridge Physics; UCL Centre for Bio-inspired Engineering; University of New Mexico; colloquium, Vienna

2021: Newcastle; Erlangen; Rutgers; Princeton; Varanasi; CECAM Mixed-Gen; Technion; RRI Bangalore; DAMTP Cambridge; Courant NY; Edinburgh; NSCS webinar Israel; Zhejiang

2020: BLCS Annual Training Workshop; Utrecht; CECAM; Amherst; Kent State; UC Merced; Nordita; Georgia Tech (on-line)

2019: Dresden; National Nanotechnology Center of Turkey

- 2018: Bristol; Higgs Colloquium, Edinburgh; Warwick; Birmingham; Durham; St Andrews
- 2017: York; Oxford Comp-Bio; Dublin; Paris; ICTS Bangalore
- 2016: Durham; Oxford 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

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

- 2024-29 ERC Advanced Grant, €1.6M (funded by UKRI as a Frontier Grant)
- 2022-26 Physics of Life Interface (UKRI & Wellcome)
- 2019-23 HORIZON 2020 ITN ActiveMatter (Oxford PI)
- 2017-20 HORIZON 2020 ITN LUBISS (Oxford PI)
- 2017-19 Royal Society International Exchange (with Taiwan)
- 2017-18 BBSRC Priming Food Partnerships: Modelling Digestion (Oxford PI)
- 2016-18 EU Marie Curie: GelSwimming, 2 year PDRA (Andreas Zoettl)
- 2015-18 HORIZON 2020 ITN DISTRUC (co-PI)
- 2015-19 HORIZON 2020, FETOPEN: ABIOMÁTER (Oxford PI)
- 2012-17 ERC Advanced Grant

### Editorial appointments, etc.(since 2014):

APS Outstanding Referee (2021); Board Member, Droplet (2022–); Editorial Board, La Rivista del Nuovo Cimento (2020–); Oxford Encyclopedia Advisory Board (2018–); Editorial Board, J. Phys. A (2019–); Editorial Board (2019–20) & Advisory Board (2020–), Molecular Physics; Editorial Board, Phil. Trans. A (2016–); Guest Editor, Journal of Physics: Condensed Matter special issue *Fluids at Structured Surfaces* (2016); Editorial Board, Phys. Rev. E (2014–); Editorial Board, Journal of Statistical Physics (2015–)

#### **Public engagement:**

- 2024 Morning of Theoretical Physics, Oxford
- 2024 Institute of Physics, Salisbury group lecture
- 2023 Institute of Physics, London and SE Branch lecture
- 2021 Physicists under the Microscope, on-line video
- 2021 Lecture, PhysSoc, Oxford
- 2021 Lecture, IIT Madras
- 2021 National Academy of Sciences, India, Delhi Chapter
- 2021 *Coherence*, student lectures, Bangalore
- 2020 Panel, UN Women, Oxford
- 2019 PLANCKS, International Association of Physics Students
- 2019 Morning of Theoretical Physics, Oxford
- 2017 Kaapi with Kuriosity, Bangalore
- 2017 Portsmouth and District Physical Society
- 2013 Institute of Physics branch lectures: London and SE Branch, Berkshire, Merseyside, Manchester, Hereford & Worcester, South Central, Open University, Cambridge, Oxford
- 2015 Lecture, Wykeham Abbey School
- 2014 19 Chair, Think Physics Advisory Committee

(HEFCE-funded initiative to encourage young people in the NE into STEM careers)

- 2009 11 Lead exhibitor, Nature's Raincoats, Royal Society Summer Science Exhibition; Techfest, Mumbai; Oxfordshire Science Festival; Cheltenham Science Festival
- 2008 Governor, Francis Holland Schools Trust
- 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

# Graduate supervision:

40 graduate students who have completed their D. Phil.

Former students and post-docs who now hold academic positions include Arnold Mathijssen (University of Pennsylvania), Tyler Shendruk (Edinburgh), Amin Doostmohammadi (Niels Bohr Institute), Davide Marenduzzo (Edinburgh), Mike Swift (Nottingham), Gareth Alexander (Warwick), Halim Kusumaatmaja (Durham), Enzo Orlandini (Padua), Flavio Seno (Padua), Cristian Micheletti (Trieste), Alexander Wagner (North Dakota), Jorn Dunkel (MIT), Mitya Pushkin (York), Paul Upton (Open University), Sumesh Thampi (IIT Madras), Rodrigo Ledesma (Northumbria), Miha Ravnik (Ljubljana), Bortolo Mognetti (Brussels), Colin Denniston (London, Ontario), Scott Edwards (Shenzhen), Philip Duxbury (Michigan)