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Google Scholar: <https://scholar.google.com/citations?user=aiMRGFUAAAAJ&hl=en>

Academic Career & Employment

2013-present Associate Professor in Applied Mathematics, University of Leeds (UK)
2009 - 2013 Lecturer (\approx Assistant Professor) in Applied Mathematics, University of Leeds (UK) (recruited in 2008)
2007-2009 Advanced Research Fellow (Mathematics & Complexity), University of Warwick (UK)
2005-2007 Humboldt Research Fellow (Theoretical Physics), University LMU of Munich (Germany)
2002-2005 Postdoc. Research Fellow (Theoretical Physics), Boston University & Virginia Tech (USA)
1998-2002 PhD in Theoretical Physics (Dr. Sc. = PhD equivalent) awarded with high distinction
Swiss Federal Institute of Technology, EPFL (Lausanne, Switzerland). Viva date: 13/03/2002
1993-1998 MSc in Physics (Dipl. Phys. EPF = MSc equivalent), Swiss Federal Institute of Technology, EPFL

Summary of Scientific Results (08/2019) (see <http://www1.maths.leeds.ac.uk/~amtmmo/Research.html>)

- **62 peer-reviewed papers** (29 as first author, 11 single-authored) and **H-index 26**
- **3604 citations** and 2315 since 2014; average citations/paper > 54; 11 publications with >100 citations, 15 with > 50 citations and 49 with ≥ 10 citations.
- 1 publication in Nature; 7 in Phys. Rev. Lett.; 1 in Phys. Rev. X; 23 in Phys. Rev. E & B; 1 in ISME Journal, 1 in Phys. Life. Rev., 3 in J. Phys. A; 4 in J. Theor. Biol.; 5 in EPL; 4 in JSTAT; 2 in J. Stat. Phys.; 2 in J. Roy. Soc. Interface, 1 in Eur. Phys. J. B; 1 in Chaos, Solitons & Fractals; 1 in J. Phys.: Cond. Matter; 1 in Games; 3 in Banach Center Publ. + 1 in Springer Proceedings.
- International conferences & seminars: given 65 invited talks and 38 contributions in international conferences or graduate schools, including 15 as invited speaker. Organization of 13 schools/workshops
- Research featured in international media through press and radio coverage (see below)

Awards and Research Grants (selection)

2019 Grants of the EPSRC Network Plus in Physics Far From Equilibrium & Leeds School of Maths
10/18 - 09/21 China Scholarship Council PhD studentship for X. Li (*Lead Supervisor*)
2017 Grants from London Mathematical Society (Scheme 4) & Leeds School of Maths
10/16 - 03/20 EPSRC PhD studentship for R. West (EP/N509681/1, *Lead Supervisor*)
2016 Humboldt Foundation grant for a research leave at LMU Munich (3.3-GBR/1119205 STP),
2015 Grants from London Mathematical Society (Scheme 4) & Leeds School of Maths
10/13 - 03/17 EPSRC CASE award by the KTN for industrial mathematics (EP/L50550X/1)
10/10 - 03/14 EPSRC PhD studentship for B. Szczesny (EP/P505593/1, *Lead Supervisor, completed*)
02/08 - 07/09 Advanced Research Fellowship of the Swiss NSF (PA0022-119487)
08/05 - 10/07 Research Fellowship of the (German) Humboldt Foundation (IV-SCZ/1119205 STP)
09/02 - 01/05 Postdoctoral Research Fellowship of the Swiss NSF (81EL-068473)

Memberships, Affiliations & Scholarship

08-12/2014 Visiting Fellow at the Isaac Newton Institute for Mathematical Sciences
06/2013 + 02/2018 Member of the U.K. EPSRC Mathematics prioritisation panel
2013 - present Coordinator of the School of Mathematics' Undergraduate Summer Bursary Scheme
2013 - present Fellow of The Higher Education Academy (FHEA)
2011 - present Member of the international Complex Systems Society
2010 - present Member of the U.K. Engineering and Physical Sciences Research Council College
2005 - present Member of the Humboldt Foundation's Network of Fellows
2004 - present Member of the American Physical Society & European Physical Society
2002 - present Referee for 35 journals + 6 funding bodies (incl. EPSRC, BBSRC & Leverhulme Trust)

Supervision Experience

2010 - present Supervision of 9 PhD (4 PhD completed) + 6 MSc + 12 BSc students (Maths, Uni. Leeds)
2008 - 2009 Supervision of 1 MSc student (Maths & Complexity, University of Warwick)
2005 - 2007 Co-supervision of 2 PhD + 1 MSc students (Theoretical Physics, University of Munich)
2013-2014 Dr. Yanfei Jin (postdoctoral visitor, Beijing Institute of Technology)

Teaching: Taught 7 maths (levels 0, 1, 3 and 5M) modules at Leeds. Since 2014: Design, management & delivery of 3rd- and 4th-year modules “Evolutionary Modelling” & “Advanced Evolutionary Modelling”

Fields of Expertise & Interest:

Non-equilibrium Statistical Mechanics; Mathematical Biology & Ecology; Stochastic Processes; Individual-based models; Evolutionary and Population Dynamics in the Life and Social Sciences; Complex Systems including Opinion Dynamics, Game Theory, Dynamics of and on Networks

Presentations: 65 invited seminars and 38 presentations in conferences. Highlights of some talks:

- 26-29/03/18 (British Applied Maths Colloquium 2018, St Andrews): *Eco-Evolutionary Dynamics in a Randomly Switching Environment: Competition & Cooperation*
- 18-22/07/2016: Speaker at the STATPHYS26 in Lyon: *Nonlinear q-Voter Models with Zealotry*
- 05/03/15 (2015 American Physical Society March Meeting in San Antonio, USA): *Spiraling patterns in evolutionary models inspired by bacterial games with cyclic dominance* (invited speaker).
- 10-11/05/14: (“Novel Applications of Statistical Mechanics: A Celebration of Sidney Redner’s Contribution”, Boston, USA): *Zealotry, persuasion and polarization in voter models* (invited speaker).
- 29/11/13 (CS&F Conference on “Collective Behavior and Evolutionary Games” in Amsterdam, NL): *Prisoner’s dilemma in the presence of facilitators and under extrinsic noise* (invited speaker).
- 09-12/04/13 (British Applied Maths Colloquium 2013, Leeds): *Anomalous metastability and fixation properties of evolutionary games on scale-free networks* (invited speaker)
- 14/09/11 (European Conference on Complex Systems ECCS’11 in Vienna, AT): *Large Fluctuations and Fixation in Evolutionary Games with Non-Vanishing Selection* (invited speaker).

Workshops & Schools: Organization + management of workshops and postgraduate school (selection)

- 2-5/07/19 in Leeds: *Fluctuations, tipping points & emergence in eco-evolutionary dynamics*
- 25/07/17 (CoSyDy workshop at Leeds): *Network Dynamics and Structure*
- 12/05/16 (CoSyDy workshop at Leeds): *Dynamics of Agent-Based Models*
- 05/06/13 (CoSyDy workshop at Leeds): *Complexity in Economics & Social Dynamics*
- 25/05/12 (PG School, Brussels, BE): *Rock-Paper-Scissors & Cyclic Bacterial Games* (Lecturer)
- 02/03/12 (CoSyDy workshop at Leeds): *Evolution & Diversity in Complex Systems*
- 13/06/11 (in Manchester): *Complexity of Evolutionary Processes in Biology & Behavioral Sciences*
- 15/11/10 (CoSyDy workshop at Warwick): *Movement in Models of Mathematical Biology*
- Since 02/10: Founder & Chairman of the UK *Complex Systems Dynamics (CoSyDy)* network
- 23/09/09 (ECCS’09 Satellite at Warwick): *Statistical Mechanics of Molecular & Cell Biology*
- 11-13/12/07 (International PG School at Warwick, UK): *Mathematics of Evolutionary Dynamics*

Media Coverage (selection): My research has received the following international media coverage

- *Fluctuating environments can help cooperating bacteria* in Phys.org and AlphaGalileo
- University of Leeds press release and LMU press release: *Fluctuating conditions favor cooperation*
- Nature **448**, 1046-1049 (2007) selected by Faculty of 1000 Biology and recommended for *Technical Advance* and *New Finding*
- *Rock, paper, toxins* in Science News magazine
- In Spanish: *Rock, paper or scissors & the biodiversity via coevolution* in ‘Francis (th)E mule Science’s News’;
- *Biodiversity in Spatial Rock-Paper-Scissors Games*, Mathematica’s Wolfram Demonstration Project
- *Stochastic Rock-Paper-Scissors Population Dynamics*, Mathematica’s Wolfram Demonstration Project
- *Zealots put the spin into voting* in Physicsworld
- In German: *Mobility hinders biodiversity* in “Pressrelation.de”;
- In Italian: *Particles and voting behaviors*; 20-minute interview on “Radio24. Il Sole 24 Ore”
- In Italian: *Are zealots like electronic spins?* in “Le Scienze”;
http://lescienze.espresso.repubblica.it/articolo/Gli_attivisti_elettorali_come_gli_spin_degli_elettroni/1287352

Three Representative Publications (accumulating > 820 citations)

1. *Mobility promotes and jeopardizes biodiversity in rock-paper-scissors games*
Nature **448**, 1046-1049 (2007); DOI:10.1038/nature06095
2. *Does a single zealot affect an infinite group of voters?*
Phys. Rev. Lett. **91**, 28701 (2003); DOI:10.1103/PhysRevLett.91.028701
3. *Evolution of a fluctuating population in a randomly switching environment*
Phys. Rev. Lett **119**, 158301 (2017); DOI:10.1103/PhysRevLett.119.158301