CV – Davide Michieletto

Michieletto, Davide -- ORCID: 0000-0003-2186-6869

Date of birth: 12/06/1987 -- Nationality: Italy -- URL for web site: www2.ph.ed.ac.uk/~dmichiel/

EDUCATION

- 2015 PhD, Dept. of Physics and Centre for Complexity Science, University of Warwick Supervisor: Matthew S. Turner; Thesis: "Topological Interactions in Ring Polymers"
 2012 MSc in Complexity Science (with Distinction)
- 2011 Dept. of Physics and Centre for Complexity Science, University of Warwick, UK MSc in Theoretical Physics (1st class equivalent, cum laude)
- 2009 Department of Physics and Astronomy, University of Padova, Italy BSc in Physics (1st class equivalent)
 - Department of Physics and Astronomy, University of Padova, Italy

CURRENT POSITION

1/2021–2026 Royal Society University Research Fellow (Reader equivalent)

School of Physics and Astronomy & Institute of Genetics and Cancer, UEDIN, UK. PI of the "Topologically Active Polymers" Lab.

PREVIOUS POSITIONS

2020–2020 Leverhulme Early Career Fellow School of Physics and Astronomy, UEDIN, UK Independent fellowship to study topological materials

2019–5/2020 Research Fellow

Department of Mathematical Sciences, University of Bath, UK PI: Dorothy Buck Project: DNA topology in vivo

- 2017 2019 **Research Assistant**, School of Physics and Astronomy (SoPA) & Institute of Genetics and Molecular Medicine (IGMM), UEDIN, UK PIs: Davide Marenduzzo and Nick Gilbert (wet lab advisor) Project: Simulations and Super-Resolution Microscopy of Chromatin Structure I shared my time in between SoPA and a wet lab at the IGMM where I learned a range of molecular biology skills and microscopy techniques.
- 2015 2017 **Research Assistant,** School of Physics and Astronomy, UEDIN, UK PI: Davide Marenduzzo Project: Computational Models of Epigenomic Organisation Computational modelling to understand the folding of chromatin in vivo.

FELLOWSHIPS

 2020 – 2021 Leverhulme Early Career Fellowship (68k GBP) Success rate 2019 = 14%
 2021 – 2026 Royal Society University Research Fellowship (800k GBP) Success Rate = 5-10%

- **GRANTS** 2021 – 2026 PI – ERC Starting Grant – 1.5M EUR
 - To study Topologically Active Polymers (TAPs).
- 2019 2023 coPI COST EUropean TOPology Interdisciplinary Action (CA17139) 0.5M EUR I co-wrote the grant application, sit in the management committee, I am part of the core group, unanimously appointed as leader of the working group on DNA, I cochair the exploitation board and am one of the two UK representatives.
- 2019 2020 PI Royal Society International Exchanges 6k GBP To visit Prof. Roberston-Anderson's team in San Diego.
- 2019 2020 coPI Scottish Universities Life Science Alliance (SULSA) 10k GBP Technology Seed Funding Grant To develop novel algorithms for super-resolution imaging. Jointly with M Marenda (Edinburgh) and S van de Linde (Strathclyde).

- 2019 2020 PI 2x EPSRC/BBSRC Sandpit Grant (Physics of Life Network) 3k GBP To establish collaborations with biologists on epigenetics (Prof Higgins, Newcastle), and DNA transposition (Drs Bousios, Sussex and Nuetzman, Bath)
- 2016 PI Institute of Physics Early Career Researcher Fund 600 GBP
- 2016 2020 PI Supercomputing Time-Grant (EUSMI/JURECA, 2M CPU-h ~ 40k GBP) Computing time on supercomputer for large-scale simulations.
- 2015 PI Institute of Physics Conference Bursary 300 GBP
- 2011 2015 PI EPSRC Scholarship 50k GBP

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

- All done at the School of Physics and Astronomy, University of Edinburgh, UK
- Since 2020 Main supervisor of 3 Postdoctoral Research Assistants
- Since 2020 Main supervisor of 5 PhDs (Battaglia, Brown, Palombo, Hartnett, Hongh-Minh)
- Since 2015 Co-supervisor of 2 PhDs (Y Fosado completed, A Bonato ongoing)
- Since 2019 Main supervisor of 7 MPhys students (5 completed, 2 ongoing)
- Since 2018 Main supervisor of 20 SenHon projects (16 completed, 4 ongoing)

ORGANISATION OF SCIENTIFIC MEETINGS (main organiser + 4 more as co-organiser)

2022 **EUTOPIA Summer School, Paris, France** Summer School, 50 participants, sponsors: COST, Horizon2020 https://www.physicsoflife.org.uk/physics-of-life-summer-school-2022.html 2022 Interdisciplinary Challenges in Non-Equilibrium Physics III, Edinburgh, UK Summer School, 160 participants, sponsors: Higgs centre, Physics of Life https://www.physicsoflife.org.uk/physics-of-life-summer-school-2022.html 2019 Interdisciplinary Challenges in Non-Equilibrium Physics, Edinburgh, UK Conference, 70 participants, sponsors: Higgs centre, Physics of Life https://www2.ph.ed.ac.uk/~dmichiel/EdinburghMeeting2019.html 4D Epigenome, Venice, Italy 2019 Conference, 40 participants, sponsor: COST, Horizon2020 https://www2.ph.ed.ac.uk/~dmichiel/VeniceMeeting2019.html 2018 Biophysics of Epigenetic and Chromatin Dynamics, UK Conference, 50 participants, sponsors: Higgs centre and Physics of Life https://higgs.ph.ed.ac.uk/workshops/the-physics-of-epigenetic-and-chromatindynamics/

REVIEWING ACTIVITIES

- 2022 Reviewer for ERC Synergy Grants
- 2020 Awarded Outstanding Referee prize by RSC "Soft Matter"
- 2019 Reviewer for BBSRC (UK), ANR (France), DFG (Germany), NWO (Netherlands) Grants
- 2016 Reviewer for Phys Rev Lett, PNAS, Phys Rev X, Nat Comm, Nature Struct Mol Biol, etc.

MEMBERSHIPS TO SCIENTIFIC SOCIETIES/COMMITTEES

- 2021 Invited to sit on the JACS Au Early Career Advisory Board (<24 scientists worldwide)
- 2021 Member of the Statistical Mechanics & Thermodynamics RSC Group committee
- 2019 Member of Research Network "EUTOPIA" (COST Action CA17139)
- 2016 Associated Member of IoP (UK) & Member of the Italian Physics Society (SIF)

PRIZES

2021 Statistical Mechanics and Thermodynamics Early Career Award, RSC

- 2020 Chancellor's Rising Star Award, University of Edinburgh, UK
- 2016 Faculty of Science PhD Thesis Prize, University of Warwick, UK
- 2016 Outstanding PhD Thesis Prize, Springer Publishing Group, Germany

2015 Ian Ward Mcmillan Prize, Institute of Physics, UK