

George D. Watson

Qualifications, memberships, & awards

George D. Watson MPhys (Hons) Ebor, MInstP

Academic Qualifications

- **PhD Physics**
University of York • 2017–2020 (expected)
Supervisors: Agnes Noy, Mark Leake
- **MPhys (Hons) Theoretical Physics** (with first-class honours)
University of York • 2013–2017
Dissertation: “Probing DNA intercalation through targeted molecular dynamics simulation of ellipticine and anthracene-derived ligands”
Supervisor: Robert Greenall

Memberships

- **Member**, Institute of Physics (MInstP)

Awards

- **Best Talk**, Physics Postgraduate Conference 2018
University of York • 21 September 2018
(Institute of Physics-sponsored prize)

Talks

Internal

- **Physics Postgraduate Conference 2018**
University of York • 21 September 2018
“Molecular dynamics simulation of supercoiled DNA minicircles”
(**Winner: Best Talk**)
- Regular Physics of Life Group & Biological Physics Group meetings •
University of York • 2018–

Poster Presentations

External

- **The Physics of Microorganisms II**
Institute of Physics • 8 April 2019
“Atomistic simulations unveil the influence of DNA topology on IHF–DNA interaction”
- **Physics of Life Summer School: New Approaches to Biomolecular Structure, Dynamics and Function**
Durham University • 16–20 July 2018
“Atomistic simulation of DNA supercoiling”

Internal

- **BPSI Summer Symposium 2018: Business as Usual?**
University of York • 28 June 2018
“The influence of DNA topology on IHF-DNA interaction unveiled by atomic simulations”
- **BPSI Spring Symposium 2018: Digital Healthcare**
University of York • 20 March 2018
“Atomistic simulation of DNA supercoiling”

Teaching

- **Advanced Computational Laboratory** (practical demonstration)
University of York • 2018–
Supervise, guide, and assist students developing various programs for physical simulation, primarily in Fortran 90, during third-year computational laboratory; led an experiment in single-particle plasma simulation, which included giving a short introductory lecture
- **Molecular Simulation** (practical demonstration)
University of York • 2018
Provided support and assistance to third-year students during molecular dynamics workshop sessions

Outreach

- **York Researchers’ Night (YorNight)**
University of York • November 2018

“Meet Your Molecules in VR”

Performed interactive VR demonstrations of biological molecules and 3D visualisation techniques in biophysics to members of the public of various ages and backgrounds at a well attended event

Event webpage

Administration

- Responsible for redesigning and maintaining the Physics of Life Group website and @PhysLifeYork Twitter account.

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