





# Enrico Gavagnin

Research Associate

Applied mathematician with PhD and 2+ years' post-doctoral experience in theoretical and experimental epidemiology. Knowledgeable and interested in modelling collective dynamics and complex networks.

 [gavagnin.enrico@gmail.com](mailto:gavagnin.enrico@gmail.com)  
 +44 (0)7519455694  
 [enricogavagnin.github.io](https://github.com/enricogavagnin)  
 [linkedin.com/in/enricogavagnin](https://linkedin.com/in/enricogavagnin)

## EXPERIENCE

### Research Associate

University of Bristol, School of Life Sciences

03/2020 - present  
Bristol, UK

- Using social insects as biological model to study epidemiological dynamics.
- Processing and analysing large datasets of social interaction networks
- Conceiving, designing and performing experiments with social insects using automated individual-tracking
- Cross-disciplinary team working, line manager of two lab assistants, Sustainability Lab coordinator
- Conceiving, supervising and time managing master's projects

### PhD

University of Bath, School Mathematical Sciences

2016 - 2020  
Bath, UK

- Theoretical and applied research in the field of mathematical biology. Thesis: "Stochastic multiscale models of cell behaviour"
- Conceiving and leading interdisciplinary research projects with international collaborations
- First author of five scientific publications in peer reviews journals (Physical Review E, Journal of Theoretical Biology, Biophysical Journal, Elsevier Handbook of Statistics)
- Teaching assistant for the courses Programming, Modelling and dynamical systems, Probability and Statistics
- Visiting scholarship at Queensland University of Technology, Australia

## EDUCATION

### MSc, Pure and Applied Mathematics

Università degli Studi di Padova

Erasmus+ exchange the University of Bristol  
2014 - 2016, Padova, Italy

### BSc, Pure and Applied Mathematics

Università degli Studi di Padova

2011 - 2014, Padova, Italy

## TECHNICAL SKILLS

### Mathematical modelling:

Multiscale modelling (agent-based/PDE),  
Probability and complex network analysis,  
Bioinformatics and statistical methods

### Programming Languages

Python, Matlab, R, Bash, Linux HPC, C, Git

### Laboratory:

Microscopy image analysis (ImageJ),  
Trained in qPCR, experimental planning

### Languages:

English (proficient), Italian (native), Spanish (intermediate)

## AWARDS

Best talk – NWE-IUSSI winter meeting

Dec 2021, Oxford, UK

TakeAIM first prize, Smith Institute

Feb 2020, Oxford, UK

Santander Mobility Award - Travel grant

Aug 2020, Brisbane, Australia

Landahl Travel Grant - Society of  
Mathematical Biology

Jul 2017, Salt Lake City, Utah

## SELECTED TALKS

Queensland University of Technology (invited speaker)

Apr 2019, Brisbane, Australia

University of Queensland - invited speaker

Apr 2019, Brisbane, Australia

Modelling stochastic biological systems,  
BAMC (co-organizer)

Apr 2019, Bath, UK

Center of Information Services and High  
Performance Computing, TU (invited speaker)

Dec 2018, Dresden, Germany

Swiss Federal Institute of Aquatic Science  
and Technology (invited speaker)

Dec 2018, Zurich, Switzerland

Multi-scale models of cell behaviour,  
ECMTB (co-organizer)

Jul 2018, Lisbon, Portugal