Department of Mathematical Sciences Postgraduate Research Handout 2017/18

1. Welcome to the Department

1.1 Department of Mathematical Sciences

The Department of Mathematical Sciences is an integrated department, whose work in the three areas of Pure Mathematics, Applied Mathematics and Statistics has an international reputation. In 32% of our submitted research activity has achieved the highest possible Research Excellence Framework (REF) classification of **4***, defined as world-leading in terms of originality, significance and rigour. 87% was graded 4*/3*, defined as world-leading/internationally excellent. Our overall grade point average (GPA) is 3.17. Based on these results, we are placed **12th in the research quality ranking of UK universities**, excluding specialist institutions.

Staff in all three areas are involved in a very wide range of national and international research activities and several members of the Department have won prestigious prizes, medals and research fellowships for their work.

All parts of the Department welcome research students (both full-time and part-time) working towards the degrees of PhD, Integrated PhD and MPhil. With 24 Professors and 30 other academic staff, a wide range of research topics can be supported in depth and students with a good honours degree, or equivalent, will find much to enrich their scientific interests. Research in the Department covers a wide spectrum from the very pure to rather more applied aspects of Mathematics and Statistics. Some research is of a fundamental theoretical nature while much of the more applied work involves collaboration with other departments in the University, with industry and technology, and with government research departments. Each of the research groups within the Department runs regular seminar programmes.

2. Department Structure

The Mathematical Sciences Department is led by the Head of Department, Professor Peter Morters. The Head of Department directs all aspects of the Department, operating through a number of nominated role-holders and through the deliberations of a number of committees. The following sections introduce some of these roles and committees.

2.1. Who's Who in the Department

See http://www.bath.ac.uk/math-sci/contacts/ for a full list of Department staff. Some contacts most relevant to PG students are:

Head of Department   Prof Peter Morters
Director of Studies – Research students   Dr Adrian Hill
Department Coordinator   Myla Dixon

2.2 Research Areas of the Department

Research in the Department is based on teams focusing on particular research areas but with a strong culture of collaboration and mutual support.

The groups within Mathematics include work on:
- Algebra and Geometry
- Analysis and Differential Equations
- Continuum Mechanics and Waves
- Industrial Applied Mathematics
- Mathematical Biology
- Mathematical Control Theory
- Numerical Analysis

The Statistics group covers a range of work on:
- Statistics
- Probability

2.3 Doctoral College in Mathematical Sciences

The Doctoral College in Mathematical Sciences is an exciting opportunity designed to broaden and deepen the training given to PhD students, which involves taking six taught courses in the first 18 months. The aim of the Doctoral College is to provide students with a wide and thorough formal training in mathematics in areas not directly linked to their chosen research area, to generate a culture of continued learning and to produce students who are in the forefront of research. From 2007, we have been broadcasting and receiving live graduate taught courses with students in Oxford, Imperial, Warwick and Bristol. Each student's programme of study is decided early in the first semester after discussion between the student, supervisor and Postgraduate Director of Studies and approval by the Faculty Research Students Committee.

What Previous PhD Students Say About Us

"*The department has always struck me as incredibly inclusive and supportive so a big thank you to all who work and study there in contributing to this atmosphere. I would particularly like to mention the administrative and computer support staff who are invariably quick and eager to help and a pleasure to deal with*." – Barrie Cooper

"*Many thanks to the staff and postgraduate students in the Department of Mathematical Sciences for providing a friendly and supportive environment*."- Lorina Varvaruca)

"*I would like to thank (…) the computing support and administration for always being here for me.*" – Patrick Lechner

"*I would also like to thank all the staff and postgraduate students in the Department of Mathematical Sciences for providing such a friendly and supporting environment.*"

"*Many thanks to my friends and colleagues from the University of Bath for all the good moments spent together! In particular, thanks to my office mates throughout the years […] for making the time at work a pleasure, and to all those who work hard behind the scene to keep the Department ticking.*"– Zhivko Stoyanov

Department Website:
http://www.bath.ac.uk/math-sci/