



Examples of recent PhD projects submitted to the MPE CDT

1. "Improving time - stepping schemes in weather and climate models"

Principal supervisor: Dr Paul Williams (University of Reading, Department of Meteorology)

Co-supervisors: Dr Hilary Weller (University of Reading, Department of Meteorology) and Dr Javier Amezcua (University of Reading, Department of Meteorology)

2. "Predicting the flow of ice sheets"

Principal supervisor: Prof Nancy Nichols (University of Reading, Department of Mathematics and Statistics)

Co-supervisors: Prof Martin Siegert (Imperial College London, the Grantham Institute for Climate Change), Prof Michael Baines (University of Reading, Department of Mathematics and Statistics) and Dr Bertrand Bonan (University of Reading, Department of Meteorology)

3. "Moving meshes for Global Atmospheric Modelling"

Principal supervisor: Dr Hilary Weller (University of Reading, Department of Meteorology)

Co-supervisors: Prof Beatrice Pelloni (University of Reading, Department of Mathematics and Statistics), Dr Tristan Pryer (University of Reading, Department of Mathematics and Statistics), Dr Philip Browne (University of Reading, Department of Meteorology), Prof Mike Cullen (Met Office) and Prof Chris Budd (University of Bath, Department of Mathematics)

4. "Using optimal transport theory to calculate the background state of the atmosphere and its stability"

Principal supervisor: Prof John Methven (University of Reading, Department of Meteorology)

Co-supervisors: Prof Beatrice Pelloni (University of Reading, Department of Mathematics and Statistics), Dr Hilary Weller (University of Reading, Department of Meteorology) and Prof Mike Cullen (Met Office)

5. “A new approach to measuring the solar spectrum”

Principal supervisor: Prof Joanna D. Haigh (Imperial College London, the Grantham Institute for Climate Change)

Co-supervisors: Dr Daniel Mortlock (Imperial College London, Department of Physics and Prof Eugene (Rozanov Physicalische Meteorologische Observatorium, Davos, Switzerland)

6. “Tipping point analysis of geophysical variables”

Principal supervisor: Dr Tobias Kuna (University of Reading, Department of Mathematics and Statistics)

Co-supervisors: Dr Valerie Livina (National Physical Laboratory) and Prof Ted Shepherd (University of Reading, Department of Meteorology)

7. “Quantification and modelling of heterogeneity in urban boundary layers”

Principal supervisor: Dr Maarten van Reeuwijk (Imperial College London, Department of Civil and Environmental Engineering)

Co-supervisors: Prof Sue Grimmond (University of Reading, Department of Meteorology), Prof Janet Barlow (University of Reading, Department of Meteorology) and Prof Darryl Holm (Imperial College London, Department of Mathematics)

8. “Quantifying variability and uncertainty in high-resolution observations of urban surface temperatures”

Principal supervisor: Prof Sue Grimmond (University of Reading, Department of Meteorology)

Co-supervisors: Dr Sarah Dance (University of Reading, Department of Mathematics and Statistics), Dr Amos Lawless (University of Reading, Department of Mathematics and Statistics), Dr Cristina Charlton-Perez (Met Office), Dr Humphrey Lean (Met Office), Sue Ballard (Met Office) and Prof Nancy Nichols (University of Reading, Department of Mathematics and Statistics)