

Programme

5th OpenIFS workshop 2019



Monday (17th June)

Location: Allen Laboratory (no. 48 on the [map](#))

9:00 **Registration**

Chair: Robert Plant

10:00 **Welcome & opening**

Robert Plant (University of Reading, UK)

10:10 **OpenIFS: A portable version of IFS for research and education and an outreach activity at ECMWF**

Marcus Köhler (ECMWF, UK)

10:40 **Spectral transform (solicited)**

Andreas Müller (ECMWF, UK)

11:00 **Practical exercise on spectral method**

Andreas Müller (ECMWF, UK)

11:30 Coffee & tea break

Chair: Victoria Sinclair

12:00 **The IFS dynamical core and its new features in cycle 43r3 (solicited)**

Michail Diamantakis (ECMWF, UK)

13:00 Lunch at Allen Laboratory (no. 48 on the [map](#))

14:00 **Lake model in OpenIFS (solicited)**

Margarita Choulga (ECMWF, UK)

14:25 **ecRad: A modular radiation scheme for IFS, OpenIFS, and for offline research (solicited)**

Robin Hogan (ECMWF, UK)

15:05 Comfort break

15:10 **Practical exercise on introduction to OpenIFS**

Marcus Köhler (ECMWF, UK)

16:10 Coffee & tea break

16:30 **Practical exercise with OpenIFS on a real case study**

Gabriella Szépszó (ECMWF, UK)

17:30 End of the practical session

Tuesday (18th June)

Location:

Sutcliffe lecture theatre, room GU01, in the Meteorological Department (no. 58 on the [map](#))

8:30 **Registration**

Chair: Peter Bechtold

9:00 **Welcome & opening**

Paul Williams (University of Reading, UK)

Andy Brown (ECMWF, UK)

9:40 **Diabatic processes in extratropical cyclones (solicited)**

Heini Wernli (ETH, Switzerland)

10:20 **Poster introductions (2 minutes and maximum 2 slides each)**

1. **UTLS humidity biases during NAWDEX**
Jake Bland (University of Reading, UK)
2. **Impact of moist progress on the short-term forecast of rainfall brought by Yagi to China in 2018**
Yun Chen (National Meteorological Center of China)
3. **Arctic influence on the predictability of the cold surge occurred in China during January 2016**
Guokun Dai (Fudan University, China)
4. **A coupled shallow and deep convection closure in OpenIFS**
Mokhliss El-azaar (EHTP, Morocco)
5. **Intensification variability of tropical cyclones in directional shear flows**
Jian-Feng Gu (University of Reading, UK)
6. **Observations of the North Atlantic jet stream from NAWDEX**
Ben Harvey (University of Reading)
7. **Raspberry PiPS: the Raspberry Pi Planet Simulator**
Sam Hatfield (University of Oxford, UK)
8. **An ensemble analysis on abrupt northward turning of typhoon Meranti (2010) under the influence of an upper-tropospheric cold low**
Ying Li (Chinese Academy of Meteorological Sciences)
9. **The stratospheric dynamics simulated by the OpenIFS model**
Federico Serva (CNR-ISMAR, Italy)
10. **OpenIFS Held-Suarez test: an educational application of the statistical equilibrium concept**
Lorenzo Silvestri (CIRIAF-CRC, University of Perugia, Italy)
11. **OpenIFS simulations for sudden stratospheric warming 2018**
Irina Statnaia (University of Helsinki, Finnish Meteorological Institute)
12. **On extracting information from closure parameter convergence tests using OpenIFS**
Lauri Tuppi (University of Helsinki, Finland)

13. Impact of moist convective progress on extreme frontal rainstorm forecast using ECMWF IFS

Jun Xu (National Meteorological Center of China)

14. How likely are cold pools to trigger new convection? – not presented

Sophia Schäfer (Deutscher Wetterdienst, Germany)

10:50 Coffee & tea break

Chair: Suzanne Gray

11:20 Introducing OpenIFS@home

David Wallom (University of Oxford, UK)

11:40 The extratropical transition of Hurricane Debby (1982) and its re-development into an intense windstorm Mauri over Finland

Terhi Laurila (Finnish Meteorological Institute)

12:00 A review of the structure and variability of African easterly waves including their relationship with Atlantic tropical cyclones (solicited)

Chris Thorncroft (University at Albany, USA)

13:00 Lunch at the Meteorological Department (no. 58 on the [map](#))

Location: Allen Laboratory (no. 48 on the [map](#))

14:10 Introduction to the NAWDEX case study: Extratropical phase of tropical storm Karl

Ben Harvey (University of Reading, UK)

14:30 Practical session

15:40 Coffee & tea break

16:00 Practical session

17:30 End of the practical session

18:00 Ice breaker and poster session

Wednesday (19th June)

Location:

Sutcliffe lecture theatre, room GU01, in the Meteorological Department (no. 58 on the [map](#))

Chair: Nedjeljka Žagar

- 9:00 **Challenges and limits in ensemble weather prediction (solicited)**
Mark Rodwell (ECMWF, UK)
- 9:40 **The impact of moist processes on the large-scale extratropical circulation (solicited)**
Christian M. Grams (Karlsruher Institut für Technologie, Germany)
- 10:20 **Linking atmospheric rivers and warm conveyor belt airflows**
Helen Dacre (University of Reading, UK)

10:40 Coffee & tea break

Chair: Mark Rodwell

- 11:00 **Analysis and forecast uncertainties in the tropics: why do we care? (solicited)**
Nedjeljka Žagar (University of Hamburg, Germany)
- 11:40 **An Available Potential Energy budget for an axisymmetric tropical cyclone**
Bethan Harris (University of Reading, UK)
- 12:00 **Ensemble prediction with OpenIFS**
Pirkka Ollinaho (Finnish Meteorological Institute)
- 12:20 **Constraining stochastic parametrisation schemes using high-resolution model simulations and the OpenIFS Single Column Model**
Hannah Christensen (University of Oxford, UK)
- 12:40 Lunch at the Meteorological Department (no. 58 on the [map](#))

Location: Allen Laboratory (no. 48 on the [map](#))

- 13:50 **Practical session**
- 15:40 Coffee & tea break
- 16:00 **Practical session**
- 17:30 End of the practical session
- 19:00 **Drink and workshop dinner at ECMWF**

Thursday (20th June)

Location:

Sutcliffe lecture theatre, room GU01, in the Meteorological Department (no. 58 on the [map](#))

Chair: Christian M. Grams

- 9:00 **The impact of parametrized diabatic processes on weather forecasts (solicited)**
Keith Williams (Met Office, UK)
- 9:40 **Mechanisms for diabatic influence on the jet stream (solicited)**
John Methven (University of Reading, UK)
- 10:20 **The extratropical transition of Hurricane Ophelia (2017) as diagnosed with omega equation and vorticity equation**
Mika Rantanen (University of Helsinki, Finland)
- 10:40 Coffee & tea break
- Chair: Keith Williams*
- 11:00 **A first glance at EC-Earth and CMIP6 (solicited)**
Klaus Wyser (Swedish Meteorological and Hydrological Institute)
- 11:40 **FOCI-OpenIFS: A flexible climate model for high-resolution simulations**
Joakim Kjellsson (GEOMAR, Germany)
- 12:00 **A portable framework to generate initial conditions for IFS/OpenIFS from ERA reanalysis products using OpenIFS**
Xavier Yepes Arbós (Barcelona Supercomputing Center, Spain)
- 12:20 **The influence of orography on synoptic weather systems in tropical Southern Africa**
Emma Howard (University of Oxford, UK)
- 12:40 Lunch at the Meteorological Department (no. 58 on the [map](#))

Location: Allen Laboratory (no. 48 on the [map](#))

- 13:50 **Practical session**
- 15:40 Coffee & tea break
- 16:00 **Practical session**
- 17:30 End of the practical session
- 19:00 **Social event for early career researchers**

Friday (21st June)

Location:

Sutcliffe lecture theatre, room GU01, in the Meteorological Department (no. 58 on the [map](#))

Chair: Gabriella Szépszó

9:00 **Meridional moisture transport by extra-tropical cyclones in the Southern Hemisphere (solicited)**

Victoria Sinclair (University of Helsinki, Finland)

9:40 **Results from OpenIFS@home**

David Wallom (University of Oxford, UK)

10:00 **Group presentations (10-15 minutes each), discussion**

10:40 Coffee & tea break

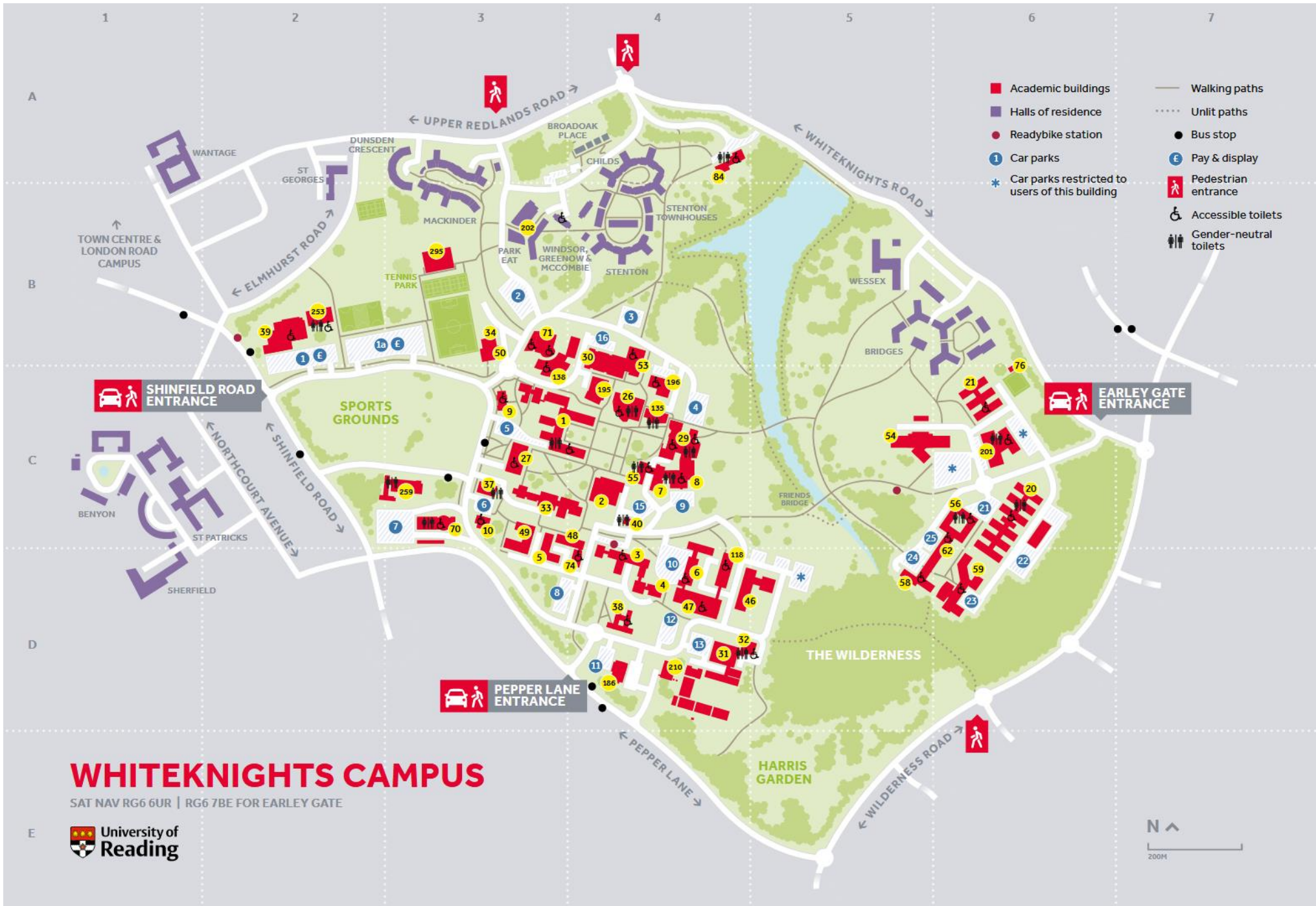
Chair: Marcus Köhler

11:00 **Group presentations (10-15 minutes each), discussion**

12:20 **Summary & closure of the workshop**

Suzanne Gray, Robert Plant (University of Reading, UK)

12:40 Lunch at the Meteorological Department (no. 58 on the [map](#))



- Academic buildings
- Halls of residence
- Readybike station
- 1 Car parks
- * Car parks restricted to users of this building
- Walking paths
- ⋯ Unlit paths
- Bus stop
- € Pay & display
- 🚶 Pedestrian entrance
- ♿ Accessible toilets
- ♂♀ Gender-neutral toilets

WHITEKNIGHTS CAMPUS

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