# "Simulating midlatitude circulation changes: what might we gain from high resolution modelling of air-sea interactions?"

### 25-26 February 2019

The Grantham Institute at Imperial College London

### **Program**

## DAY 1: Monday 25 February

10.30-11am: Tea, coffee and biscuits

<u>11am-11.30pm:</u> -Jo Haigh & Arnaud Czaja (Imperial College): Welcome, scope of workshop, scientific background.

#### 11.30am-1pm, chair: Ralf Toumi (Imperial)

-Helen Dacre (Reading University): How is moisture supplied to cyclones: the role of air-sea interactions
 -Chris Roberts (ECMWF) The atmospheric response to increased ocean model resolution in the ECMWF Integrated Forecasting System: a seamless approach
 -Nick Dunstone (Met Office): Skilful European winter and summer climate predictions in the presence of a pervasive signal-to-noise paradox

#### 1-2pm: Lunch provided

#### 2pm-3.30pm, chair: Mike Byrne (University of St Andrews)

-Malcolm Roberts (Met Office): Multi-model studies of the impact of horizontal resolution on storms and storm tracks using CMIP6 HighResMIP simulations.

-Benoit Vannière (Reading University): The impact of atmospheric models' resolution on the midlatitude climate, insights from PRIMAVERA

-Robert Lee (Reading University): Storm Impact of Gulf Stream SST biases on the global atmospheric circulation

3.30-4pm: Panel discussion with morning and afternoon speakers

4-4.30pm: Tea, coffee & biscuits

#### 4.30pm-6pm, chair: Paulo Ceppi (Imperial)

-Rhys Parfitt (Florida State University): TBC (by Skype)
-Isla Simpson (UCAR, Boulder): Modelled and observed multidecadal variability in the North Atlantic jet stream and its connection to sea surface temperatures (by Skype)
-Justin Small (NCAR, Boulder): Storm track response to ocean fronts in the high resolution simulations at NCAR (by Skype)

**<u>7pm</u>**: Dinner at Jakobs (20 Gloucester Road, London SW7 4RB), a few mn walk from the Grantham Institute.

# DAY 2: Tuesday 26 February

<u>9.30-10am</u>: Tea, coffee and biscuits

10am-12, chair: Benoit Vannière (Reading University)

-Xiaohui Ma (Ocean University of China, Qingdao): Kuroshio eddies, Storm Track and Climate Variability in the North Pacific (by Skype)

-Sybren Drijfhout (Southampton University and KNMI): Gulfstream eddies modulate Eastern North Atlantic atmospheric variability.

-Claude Frankignoul (UPMC, Paris): Asymmetry in a high-resolution simulation of the wintertime atmospheric response to Oyashio latitudinal shifts

-Shoshiro Minobe (Hokkaido University, Sapporo): "Roles of sensible and latent heat fluxes on the wintertime atmospheric responses to the Gulf Stream"

12-12.30: Panel discussion with morning speakers

12.30: Formal end of meeting