WCRP Working Group on Coupled Models (WGCM)

Sandrine Bony (LMD/IPSL, France) & Cath Senior (MetOffice, UK)
Co-chairs
WGCM Missions

- **To review and foster the development of coupled ocean-atmosphere models and ESMs.**
  
  e.g. Tuning workshop this week

- **To promote and facilitate the models evaluation and diagnosis of shortcomings**
  
  e.g. Metrics Panel (WGNE/WGCM), T-AMIP (WGNE/WGCM), satellite simulators

- **To facilitate integrated research on climate and climate change**
  
  e.g. collaborations with IAM, AIMES

- **To coordinate model intercomparisons:**
  
  e.g. **CMIP** (Coupled Model Intercomparison Project), PMIP (Paleo), CFMIP (Cloud feedbacks)

*WGCM aims at promoting research on climate and climate change by facilitating connections and coordination among global modelling groups and many communities within WCRP and beyond*
Coupled Model Intercomparison Project (CMIP)

- **Aims to address three main science questions:**
  - What are the origins and consequences of systematic model biases?
  - How does the Earth system respond to forcing?
  - How can we assess future climate changes given climate variability, climate predictability, and uncertainties in scenarios?

- **CMIP Panel:**
  - Veronika Eyring (chair), Jerry Meehl, Bjorn Stevens, Ron Stouffer, Karl Taylor

- **WGCM Infrastructure Panel (WIP):**
  - V. Balaji and Karl Taylor (co-chairs)

- **Now preparing for the 6th Phase of CMIP (CMIP6)**
0830 – 0900
Introduction and welcome, logistics (V. Eyring)
Presentation of WGCM and of the meeting objectives (S. Bony or C. Senior)

0900 - 1030 – CMIP6 Overview
CMIP6 proposal (V. Eyring, 20 min)
CMIP6 infrastructure (V. Balaji or K. Taylor, 20 min)
Discussion (50 min)

1030-1100 - Coffee break

1100 – 1200
Overview of WCRP Grand Challenges or equivalent (S. Bony, 20 min)
Obs4MIPs, Metrics Panel and evaluation tools for CMIP6 (P. Gleckler, 15 min)
Discussion (25 min)

1200 – 1245 MIPs proposals for CMIP6 (1) Systematic biases
Synthesis of MIPs proposals related to systematic biases (~15 min, P. Gleckler)
Discussion (~30 min)

1245 - 1400 – Lunch

1400 – 1515 MIPs proposals for CMIP6 (2) Forcings and response
Synthesis of MIPs proposals related to forcings and response (~45 min, B. Stevens)
Discussion (30 min)

1515 - 1545 - Coffee break

1545 – 1645 MIPs proposals for CMIP6 (3) Variability, predictability and scenarios
Long-term climate projections (15 min, C. Tebaldi or D. van Vuuren)
Decadal Predictions (15 min, G. Meehl)
Discussion (30 min)

1645 - 1715 – CMIP6: Forcings and Timeline
Overview CMIP6 forcings (V. Eyring, 5 min)
Historical emissions and concentrations (J.-F. Lamarque, 5 min)
Future emissions and concentrations (D. van Vuuren)
Discussion (15 min): Implications for the CMIP6 Timeline

1715 - 1745 – Recap