WCRP Working Group on Coupled Models (WGCM)

Jerry Meehl (NCAR, USA) & Sandrine Bony (LMD/IPSL, France)
Co-chairs

Cath Senior (MetOffice, UK): Incoming co-chair (starting next year)
WGCM Missions

- Review and foster the development of coupled ocean-atmosphere models, and now Earth System Models (i.e. with coupled carbon cycle, chemistry, aerosols, vegetation....),

- Coordinate model intercomparisons to:
  - better understand natural climate variability
  - predict the climate response to natural & anthropogenic perturbations
  - assess the climate predictability at the decadal timescale

  e.g. CMIP (Coupled Model Intercomparison Project), PMIP (Paleo), CFMIP (Cloud feedbacks)
  Transpose-AMIP (WGNE/WGCM, climate models used in NWP mode)

- Promote and facilitate the models evaluation and diagnosis of shortcomings, and understanding of processes and feedbacks in the climate system.

Done in collaboration with many partners, including: AIMES (carbon cycle), WGNE (atmospheric processes) and WGSIP (decadal climate predictability)...
and in interaction with many MIPs and communities.

WGCM promotes a balance between simulation – evaluation - understanding
Coupled Model Intercomparison Project (CMIP)

Objective: Understanding of past, present and future climate variability and change through a coordinated international multi-model experiment design.

Overseen by the CMIP Panel:
- Véronika Eyring (incoming chair)
- Natalie Mahowald
- Jerry Meehl
- Bjorn Stevens
- Ron Stouffer
- Karl Taylor

Responsible for:
- Experimental design
- Infrastructure (data format, documentation, data distribution..)

Coordinated across multiple climate science communities... within WCRP and beyond (e.g. IAMC, AIMES..)

Now preparing for the 6th Phase of CMIP (CMIP6)
CMIP6 to be centered around science questions.... including some of direct relevance to AIMES interests and expertise

... motivating this joint AIMES/WGCM meeting....