



The Abdus Salam
International Centre for Theoretical Physics



Conference on "Role of e-infrastructures for Climate Change Research"

ICTP 16 - 20 May, 2011

Conference Webpage: <http://users.ictp.it/~smr2238/>

co-sponsors



Conference Program

(updated 18 May)

Monday, 16 May

- **Registration** (also AAP-ICTP Trainees): 14:00 -15:30 & 17:30 (Lobby, Leonardo Bldg.)

- **Welcome Session:** 18:00-20:00

- **Ice-breaker:** Leonardo Bldg. Terrace (weather permitting)

- **ICTP/ INFN brief conference presentation**

Tuesday, 17 May

Morning Session 9:00

9:00-9:30 Conference Opening

- F. Quevedo, ICTP Director
- A. Vacchi, INFN Executive Board
- F. Giorgi, Head Earth System Physics, ICTP
- A. Masoni EU-IndiaGrid2 project manager
- F.Ruggieri CHAIN & EUMEDGRID-Support project manager

9:30-11:00 e-infrastructures for Climate Change Research: *The European Context*

- **Keynote Introduction**
K. Glinos, Head of Unit Head of Unit GÉANT and e-Infrastructures', European Commission, DG Information and Society
- **e-Infrastructures for Climate Change in Europe**
Climate Change Applications within the European Grid Initiative (EGI) S. Newhouse, EGI Project Director
Climate Change Applications within the Partnership for Advanced Computing in Europe (PRACE), Sergio Bernardi (Cineca)

11:00-11:30 Coffee Break

11:30-13:00 e-infrastructures for Climate Change Research: *The Asian Perspective*

- **e-Infrastructures for Climate Change in Asia-Pacific**
S. Lin, Academia Sinica Taipei, Taiwan
- **e-Infrastructures for Climate Change in China**
D. Qian, Beihang University and Principal Investigator of China National Grid (CNGrid)
- **e-Infrastructures for Climate Change in USA**
V.Balji Cooperative Institute for Climate Change, Princeton University

Lunch Break: 13:14.30

Afternoon Session: 14:30-18:30

14:30-15:30 e-infrastructures for Climate Change Research: *The Rest of the World*

- **e-Infrastructures for Climate Change in Latin America**
D. Carvalho, Centro Federal de Educação Tecnológica, Brasil
- **e-Infrastructures for Climate Change in the Sub Saharan Africa**
Tiwonge Msulira Banda, UbuntuNet Alliance for Research and Education Networking
- **e-Infrastructures for Climate Change in India**
S.K. Dash, ITT-Delhi

15:30-16:00 Coffee Break

16:00-18:00 Data for Climate Modeling

- **Common Metadata for Climate Modeling Digital Repositories, the Metafor Project**
B.Lawrence, Director of Environmental Data Curation at the UK Science and Technology Facilities Council
- **Climate Challenges at Exascale**
G. Aloisio, University of Salento, Lecce, Italy & Euro-Mediterranean Centre for Climate Change (CMCC), Italy
- **Climate Analytics for climate archive**
V.Balji Cooperative Institute for Climate Change, Princeton University
- Discussion Session

Evening Session: 18:00-19:00

Poster Session (near Main Lecture Hall)

20:00 Conference Dinner (Castello di S.Giusto) - see separate sheet

Wednesday, 18 May

Morning Session 9:00

9:00-11:00 Global Policies in Climate Research: the role of e-Infrastructures

- Opening: F. Quevedo, ICTP Director
- **The importance of global, comprehensive, and shared climate data for research and the IPCC work**
J.P. van Ypersele, Université catholique de Louvain (Belgium) and Vice-chair of the Intergovernmental Panel on Climate Change (IPCC)
- **A Nelson Mandela Approach to Climate Change: Disorienting and Discomforting, yet Rewarding and Effective**
G.H. Philander Princeton University, USA, Director of African Centre for Climate and Earth System Science

11:00-11:30 Coffee Break

11:30-13.00 Global Policies in Climate Research: the role of e-Infrastructures

- **The role of e-Infrastructures for Climate Research applications in India**
G- Beig, Indian Institute of Tropical Meteorology (Ministry of Earth Sciences, Govt. of India)
- **IS-ENES, InfraStructure for the European Network for the Earth System Modelling**
S. Joussaume Director of the National Institute of Sciences of the Universe (INSU /CNRS), IS.ENES Project coordinator (40')

Lunch Break: 13:00:14.30

Afternoon Session: 14:30-18:30

14:30-16:00 "External contributions" - Part 1

- **ICTP project for HPC infrastructures for Climate research in Africa**
C. Onime, ICTP- ICT Section
- **The Africa Adaptation Program for Africa**
I. Rector / J. Intsiful, Africa Adaptation Program, United Nation Development Program, Dakar Senegal (20')
- **E-infrastructures for the operational forecast of the biogeochemical state of Mediterranean sea: experiences from DORI and Myocean projects**
Stefano Salon, OGS, Trieste (20')
- **Chemistry in the Unified Model: Climate-Chemistry Studies with UKCA**
Maria Russo, University of Cambridge (20')

16:00-16:30 Coffee Break

16:30-17:30 "External contributions" - Part II

- **e-Infrastructures for Climate Change in the Mediterranean Area**
Salem Al-Algtash, ASREN Arab States Research & Education Network
- **TWAS Euro-Africa Cooperation on ICT Research**
Peter McGrath, TWAS (20')
- **Why do we need large computing resources for Climate Change Research? & Wrap-up**
F. Giorgi, Head ICTP Earth Systems Physics section

RegCM [Joint smr2323 & 2238] Tutorials

(Also see [Agenda: smr2323](#))

Laboratory Sessions will be held in the INFOLab, Adriatico Guesthouse, Lower Level 1

Thursday, 19 May

RegCM 4.1 Training Session 1

- 9:00 - 9:45 Introduction to RegCM 4.1: ***Gulilat Tefera / Stefano Cozzini***
9:45 - 10:30 Hands-on session: Installing RegCM 4.1: ***Graziano Giuliani***
10:30 - 11:00 Coffee Break
11:00 - 11:45 Hands-on session: Setting-up & running RegCM 4.1 Simulation 4: ***RegCM Team***
11:45 - 12:30 Hands-on session: Postprocessing RegCM 4.1 Data: ***RegCM Team***

RegCM Data - Joint Session 1

- 14:00 - 15:30 IDV Visualization tool: ***Don Murray***
15:30 - 16:00 Coffee Break
16:00 - 17:00 IDV Visualization tool: ***Don Murray***
17:00 - 17:45 Hands-on session: submit your own RegCM simulation (**Participants are supposed to prepare and submit their own simulations to produce at least 1 year of simulation during the night. Data produced will be then analyzed the day after**)

Friday, 20 May:

RegCM 4.1 Training Session II

- 9:00 - 9:45 Advanced Postprocessing/Visualization of RegCM data: ***RegCM Team***
9:45 - 10:30 Advanced usage of RegCM: CLM Band Chemistry: ***RegCM Team***
10:30 - 11:00 Coffee Break
11:00 - 11:45 Validation Procedures for RegCM Simulation 4: ***Graziano Giuliani***
11:45 - 12:30 Using RegCM 4.1 on different computational infrastructures: ***Stefano Cozzini***

RegCM Data - Joint Session II

- 14:00 - 15:30 Introduction to THREDDS server: ***Don Murray***
15:30 - 16:00 Coffee Break
16:00 - 17:00 Hands-on session: how to use THREDDS server: ***Don Murray***
17:00 - 17:45 Hands-on session: Free exercise