

EARTH SYSTEM SCIENCE ORGANIZATION (ESSO)

Ministry of Earth Sciences (MoES), Government of India

INDIAN INSTITUTE OF TROPICAL METEOROLOGY

Dr. Homi Bhabha Road, Pashan, Pune-411008



International Workshop on

Representation of Physical Processes in Weather and Climate Models (INTROSPECT 2017)

13 - 16 February, 2017

Background

The improvement of numerical models for predicting weather and climate at variety of space and time scales have taken place globally. However, there are still area of challenges which need to be addressed with better understanding of physical processes based on observations and subsequently representation of the processes through improved parameterization. This is required even more as the models are continuously being used at higher horizontal and vertical resolutions. The major challenges to the present day modelling community is, a) the need of parameterization schemes which is scale aware, b) schemes that will be stochastic and also multiscale in nature and c) a unified scheme of physical processes. The debate of cloud resolving approach or hybrid approach (with parameterized convection and grid scale cloud microphysics) and its impact on model fidelity will be emphasized.

Themes

- 1. Scale aware convective parameterization.
- 2. Grey zone problem and quasi-equlibrium closure
- 3. PDF based unified parameterization
- 4. Constraining GCM parameterization with observation

More details:

Website: www.tropmet.res.in/introspect

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Invited Speakers

Prof. Rodam Narasimha, JNCASR, Bengaluru Prof. David A. Randall, Colorado State Univ., USA

Prof. Graeme Stephens, JPL, NASA, USA

Dr. Ziad Haddad, JPL, NASA, USA

Dr. W.K. Tao, GSFC, NASA, USA

Dr. Peter Bechtold, ECMWF, UK

Dr. M. Rajeevan, MoES, India

Prof. G.S. Bhat, IISc, Bangaluru

Dr. R. Krishnan, IITM, Pune

Prof. Ravi S. Nanjundiah, IISc, Bangaluru

Prof. Brian Mapes, University of Miami, USA

Prof. Boualem Khouider, Univ. of Victoria, Canada

Dr. Hiraoki Miura, Univ. of Tokyo, Japan

Prof. In-Sik Kang, SNU, Korea

Dr. Sung-Su Park, SNU, Korea

Dr. Georg Grell, NCAR, USA

Dr. Andrew Gettelman, NCAR, USA

Prof. James Kinter, COLA, GMU, USA

Dr. Saulo R. Freitas, CPTEC, Brazil

Dr. Katherine Thayer-Calder, NCAR, USA

Venue:

Meghdoot Complex
Indian Institute of Tropical Meteorology
Pashan, Pune, India

Organised by: ESSO - IITM

Participation Deadline:

30 November 2016