



The Abdus Salam
**International Centre
for Theoretical Physics**



12th Workshop on the Theory and Use of Regional Climate Models

DESCRIPTION:

Within the CORDEX international program's mission, this workshop aims to enhance the capacity of scientists in developing nations to engage in advanced climate modeling research. By aligning with the IPCC's initiative, it seeks to increase awareness among young climate scientists from these regions about opportunities to participate in global climate research and contribute to IPCC assessments.

MORE INFORMATION:

The initiative's significance lies in its focus on climate change readiness, addressing the heightened vulnerabilities of developing nations to challenges such as water scarcity, extreme weather events, and rising sea levels. It emphasizes the integration of climate change adaptation strategies into resource management frameworks to strengthen regional resilience against climate-related adversities.

The workshop will offer a blend of theoretical lectures and practical sessions covering the principles of regional climate modeling and the utilization of regional climate models (RCMs), with a focus on the ICTP RegCM5 system—a widely employed tool worldwide, particularly among scientists in developing nations. Additionally, this edition will introduce the emerging concept of AI-based climate emulators, which is increasingly gaining attention as a research topic within the climate science community.

TOPICS:

- The theory of regional climate Earth system modeling
- Regional modeling at the kilometer scale resolution (convection permitting)
- Regional Earth system climate change simulations
- Climate impact on hazards and extreme
- Regional climate change attribution
- The RegCM5 system
- AI based regional climate emulator

SPEAKERS:

Moetasim ASHFAQ,
Oak Ridge National Laboratory, USA
Teresa CAVAZOS,
CICESE, Mexico
Tapajyoti CHAKRABORTY,
ICTP, Italy
James CIARLO,
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Graziano GIULIANI,
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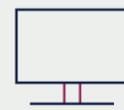
Rita NOGHEROTTO,
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Emanuela PICHELLI,
ENEA, Italy
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USP, Brazil
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Luiza VARGAS HEINZ,
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Natalia ZAZULIE,
ICTP, Italy
Graziela LUZIA,
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25 August - 5 September 2025



Trieste, Italy



**Deadline:
9 March 2025**

DIRECTORS:

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ICTP LOCAL ORGANISER

Erika Coppola, ICTP, Italy

FURTHER INFORMATION:



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Female scientists are encouraged to apply

GRANTS:

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing countries. There is no registration fee.

