

Virtual lecture series

Cloud and Precipitation Physics and Dynamics



Indian Institute of Meteorology (IITM), Pune, is organizing a virtual lecture series on *Cloud and Precipitation Physics and Dynamics*. The lecture series aims to understand cloud and precipitation processes through the latest state-of-the-art approaches to observe, simulate, and identify key uncertainties associated with aerosol-cloud-precipitation interactions. The lectures will be delivered by some of the world's leading and renowned scientists. Registered attendees will have an opportunity to interact with the speakers.



Topics covered in the series:

Introduction to cloud physics, Aerosol microphysics, Aerosol-radiation interaction, Aerosol-cloud interaction, Rain microphysics, Primary ice nucleation, Secondary ice formation, mixed-phase cloud and climate, Entrainment and mixing in clouds, Observing clouds in situ: opportunities and challenges, Ground-based remote sensing of clouds with passive instruments, physics of clouds from radar observations, Boundary layer turbulence and clouds: theoretical and experimental studies, Explicit modelling of clouds, Large-eddy simulations and application in cloud physics, Direct numerical simulations and application in cloud physics, Clouds in a laboratory, Outstanding problems in cloud physics, Monsoon clouds and their structure, Parameterizing the cloud microphysics, Principles of thunderstorm and lightning physics, The physics of clouds in a weather and climate model, application of cloud physics: severe weather, lightning, Weather modification, etc.

Date and Time:

August-December 2021.

Lectures will be once in 2 weeks. The dates and times of each lecture will be updated on the website. Lectures are for 40 minutes and followed by a 30 minute discussion.

Who can attend:

The series is targeted towards a broad range of attendees, including graduate students, early-career scientists. Basic college-level background in physics and mathematics is expected.

Registration: Free.

Required only for those interested in discussions with speakers.

Maximum number of registered participants: 100

Registration policy: On a first-come basis

If you like to participate in the lecture series please use [this participant link](#). Your email address will be used to intimate you on the upcoming lecture series.

Confirmed Speakers:

- ❖ Prof. Andy Heymsfield, NCAR USA
- ❖ Prof. Wojtek Grabowski, NCAR, USA
- ❖ Prof. Andrea Flossmann, University Clermont Auvergne in Clermont-Ferrand, France
- ❖ Dr. Darrel Baumgarder, DMT, USA
- ❖ Dr. Greg McFarquhar, University of Oklahoma, USA
- ❖ Prof. Alexander Khain, HUJI, Israel
- ❖ Prof. G. S. Bhat, IISc, India
- ❖ Dr. Paul Field, UK met office, UK
- ❖ Dr. Duncan Axisa, SIO, USA
- ❖ Dr. Ilan Koren, Weismann Institute, Israel
- ❖ Dr. Jiwen Fan, PNNL, USA
- ❖ Dr. Heike Wex, Leibniz-Institut für Troposphärenforschung, Germany
- ❖ Dr. JohannesQuass, University of Leipzig, Germany
- ❖ Dr. Rama Govindarajan, ICTS, India
- ❖ Dr. Alexei Korolev, Environment and Climate Change, Canada

Please visit the website "Virtual Lecture Series on Cloud and Precipitation Physics and Dynamics" for speaker updates and other information.

If you are interested to participate as a speaker in these lecture series kindly give us information in [this speaker link](#)

Contact email: iccp2020@tropmet.res.in