11 OCTOBER 2021 Monday, 05.30 PM IST (1200 UTC)

#AzadiKaAmritMahotsav

Lecture Series on

Cloud and Precipitation Physics and Dynamics







Aerosol activation and warm cloud microphysics

The course will cover the basics of cloud physics regarding cloud formation through the liquid phase by explaining the role of aerosol particles for the nucleation of drops. The equilibrium size of aerosol particles is given by Köhler equation and the importance of the size as well as chemical composition of aerosol particles is discusssed. Supersaturation will activate a sub-set of the aerosol particles and they can serve as cloud condensation nuclei. The nucleated drops can grow through condensation described by the droplet growth equation. While increasing in size the drops will fall and collide with other drops. Processes of rain formation and drop collision/coalescence and breakup will be covered.

Prof. Andrea Folssmann

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https://andreaflossmann.wordpress.com/



https://youtu.be/d6NMtNgu6Dw

