Dienstag, 11.07.2023, 16.00 Uhr
Sonderkolloquium
Prof. Dr. Chandrasekaran Venkatachalam
(Colorado State University, USA)
"From Raindrops to Floods"

Accurate measurement of rainfall is one of the most important and challenging problem that has been pursued for thousands of years by various civilizations. Most of the modern societies spend a lot of resources to monitor rainfall and its variability, because rainfall is the major source of freshwater. The potential for climate change and rapid urbanization has made this even more critical. Remote sensing radars have been utilized to provide a good measure of the spatial variability of rainfall patterns, nevertheless getting accurate quantitative estimate has always been a challenge. More recently major advance has been made in the area of rainfall measurement using dual-polarization radar technology.

The dual-polarization radar systems directly resolve the microphysical variabilities in rainfall, contributing to the success of rainfall measurement. This lecture will present the journey from observing raindrop shapes to regional and global measurements of rainfall to monitor the global water cycle, with a brief introduction to the NASA Global Precipitation Mission as well as the emerging urban flood monitoring radar networks that are becoming a key part of smart city infrastructure in major metropolitan regions.

Link:
https://uni-leipzig.zoom.us/j/63127920759?pwd=NC9JVHczczNVUjRiN2E2WIdsenY4dz09

Ort: LIM, Bjerknes Lecture Hall und online