LSGI RESEARCH SEMINAR

Rivers in the Sky: A Down-to-Earth Analogy in Hydrometeorology

11 DEC 2024 (WED)
4:30 - 5:30 PM
Z414, POLYU
ENGLISH

Dr Ruping MO

Manager and Senior Research Scientist
Environment and Climate Change Canada

ABSTRACT

Atmospheric rivers are long, narrow, and transient corridors of strong horizontal water vapor transport, typically associated with a low-level jet stream ahead of the cold front of an extratropical cyclone. This presentation demonstrates how to detect atmospheric rivers and assess their hydrometeorological impacts within research and operational forecasting environments. It also illustrates a multi-decade global atmospheric river catalogue for historical high-impact weather analysis.

BIOGRAPHY

Dr. Ruping Mo is the manager and a senior research scientist of the National Laboratory-West, Environment and Climate Change Canada. He completed his B.Sc. in Meteorology at Sun Yat-sen University in 1983, his M.Sc. in Atmospheric Sciences at the Chinese Academy of Meteorological Sciences in 1996, and his Ph.D. in Applied Mathematics at the University of Cambridge in 1994. Dr. Mo was a Postdoctoral Fellow at McGill University during 1995-1998, and a Research Scientist at the Center for Ocean-Land-Atmosphere Studies during 1998-1999, working on dynamical-statistical seasonal predictions.

Dr. Mo's current research projects focus on improving scientific understanding and prediction of high-impact weather in coastal and mountainous environments. These studies involve a combination of the analysis of atmospheric and oceanographic data with numerical modeling. Dr. Mo has developed several user-friendly programs to facilitate technology transfer of scientific results, especially advances in high-resolution NWP modeling and atmospheric river analysis, into operational weather forecasting.

Moderator: Prof. George LIU, LSGI

All are welcome! Please register now to join us on-site!

Enquiry: Mr Jimmy Kwan | Tel: (852) 2766 4350 |
Email: jimmy.lh.kwan@polyu.edu.hk

REGISTER NOW

THE HONG KONG POLYTECHNIC UNIVERSITY
香港理工大學

DEPARTMENT OF LAND SURVEYING AND GEO-INFORMATICS
土地測量及地理資訊學系