



## ΔΙΑΛΕΞΗ

Δευτέρα 8 Απριλίου 2024, ώρα 13:30

*Η διάλεξη θα πραγματοποιηθεί διαδικτυακά*

**ΘΕΜΑ: *Lessons learned on Arctic clouds - or - On the need to break ice***

Ομιλητής: **Michael Tjernström**, Professor (emeritus), Stockholm University

### **Abstract**

Professor (emeritus) Michael Tjernström has spent the last 25 years of his active career exploring Arctic boundary layer processes, especially boundary-layer clouds and the surface energy budget. Since this is in the Arctic Ocean and we cannot understand what we have not first observed, this was achieved by observations based on icebreaker expeditions; in the end he participated in or lead five such expeditions on the Swedish research icebreaker Oden. An interesting realization is that each of these expeditions, while being different and having different motivations and targets, each revealed something new that together evolved into a conceptual understanding of how the Arctic boundary layer works. Besides being a relevant knowledge in itself, it is also interesting to reflect how learning is achieved - and how it never stops. I also hope to be able to convey the importance of 'conceptual models' as a vehicle to such understanding and how curiosity-driven exploration of observational data can build such models.

### **Short CV**

Professor (emeritus) Michael Tjernström has spent the last 25 years of his active career exploring Arctic boundary layer processes, especially boundary-layer clouds and the surface energy budget. Since this is in the Arctic Ocean

and we cannot understand what we have not first observed, this was achieved by observations based on icebreaker expeditions; in the end he participated in or lead five such expeditions on the Swedish research icebreaker Oden. Michael got his PhD in Uppsala, Sweden, in 1988, on a thesis dealing with high-resolution modeling of low clouds and fog. He became a Senior Lecturer in 1994 and a Professor in 2000. Before dedicating to Arctic meteorology, Michael also worked on coastal mesoscale meteorology, mostly through modeling, and airborne boundary-layer research, observing atmospheric turbulence from a research aircraft. Meanwhile he published ~150 peer reviewed papers, reviewed about twice that for well respected journals and also served on many proposal review panels; he also represented Sweden in a number of international organisations. He was also Chair and and Director for both the Graduate Program and the International Meteorological Institute at the Department of Meteorology, Stockholm University, but retired on 1 January 2024 and is now an emeritus professor.

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