

Séminaire Lundi 26 Novembre 14h00 / Seminar Monday November 26 2:00 PM

Conférencier/Lecturer: Paul Kushner (Dept. of Physics, University of Toronto)

Sujet/Subject: Modelling Stratospheric Influence on the
Troposphere

Présentation/Presentation: Anglais / English

Lieu/Room: Salle au 2ème étage

Résumé/Abstract:

Although we have known for some time that the tropospheric circulation influences the stratosphere, we have more recently learned that the stratosphere can in turn influence the tropospheric circulation all the way to the surface. This two-way stratosphere-troposphere coupling, which involves dynamical links between the stratospheric circulation and the tropospheric circulation, implies that the stratosphere can significantly influence the global climate system and the pattern and magnitude of global climate change. In this talk, I will show that some aspects of stratospheric influence on the troposphere can be captured in current models, but that significant problems of understanding and non-robustness remain. I will also briefly describe a new intercomparison project, "SPARC DynVar" (www.sparcdynvar.org), that aims to address the problem of stratospheric influence on tropospheric climate in a systematic way.