

Séminaire **Vendredi 2** mai 2014 **11:00h** / Seminar **Friday** May **2th** 2014
11:00h

Subject/ Sujet : On new approaches and ideas useful in design of atmospheric models

Conférencier/Lecturer: **Janusz Pudykiewicz**

Abstract/Resumé :

Development of numerical weather prediction models in the past 20 years driven by significant advancements of computer technology led to reliable and realistic forecasts. The ever-increasing demand for scalability of the codes requires continuous parallel advancements in the area of theory as well as new numerical schemes. The talk is intended to discuss the relevant methods with the most emphasis on consistent discretization of the underlying equations. The theoretical part will be illustrated with examples of applications to several typical problems including advection, chemical kinetics, hydrostatic dynamics and a complete system of Euler equations.