



Geofizički odsjek

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O B A V I J E S T

Dana **24.1.2012. (utorak!)** u **13¹⁵ sati** održat će se u okviru seminara i kolokvija na Geofizičkom odsjeku PMF-a sljedeće izlaganje:

Dr. Stefano Serafin

*(Department of Meteorology and Geophysics, University of Vienna,
Vienna, Austria):*

Idealized simulations of daytime thermally driven winds over mountainous terrain

ABSTRACT: The mechanisms governing the daytime development of thermally driven circulations along the transverse axis of idealized two-dimensional valleys are investigated by means of large-eddy simulations. In particular, the impact of slope winds and turbulent convection on the heat transfer from the vicinity of the ground surface to the core of the valley atmosphere is examined.

The daytime thermal structure of the valley boundary layer (VBL) is then compared to that of the convective boundary layer (CBL) above a plain. Simulations in the two environments consider similar thermal forcing, thus allowing an analysis of the response to heating in the VBL and CBL in light of the volume-effect theory. The latter is traditionally invoked to explain the larger diurnal temperature ranges commonly observed in valleys. It is found that, rather than to a volume effect, the greater diurnal thermal excursion observed in the valley atmosphere is likely related to the greater vertical extent of the convectively mixed layer.

Pozivaju se studenti, apsolventi i svi zainteresirani da prisustvuju predavanju, koje će se održati u predavaoni br. 2 Geofizičkog odsjeka PMF-a, Horvatovac 95, Zagreb.