



## Geofizički odsjek

Prirodoslovno-matematički fakultet, Sveučilište u Zagrebu

Horvatovac bb, 10000 Zagreb

Tel. (01) 4605-900, fax: (01) 4680-331

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### O B A V I J E S T

Dana 18.3.2009. u 13<sup>00</sup> sati će se održati u okviru seminara i kolokvija na Geofizičkom odsjeku PMF-a sljedeće izlaganje:

dr. sc. Mathieu Dutour

(Laboratorij za satelitsku oceanografiju, Institut Ruđer Bošković, Zagreb):

### **A new approach for bathymetry smoothing in realistic oceanic modelling (ROMS)**

**SAŽETAK:** The sigma-coordinate ocean models are currently used for large basin as well as coastal seas simulations. When there is a strongly varying bathymetry the sigma-coordinate system solutions exhibit an intrinsic error in the horizontal pressure gradient term. As a consequence bathymetry smoothing is a necessity for realistic oceanic modelling. Several known approaches are commonly used: Shapiro filter, Laplacian filter, Mellor Ezer-Oey method and the recently proposed procedure of Martinho and Batteen. A new, linear-programming (LP) procedure has been proposed to deal with the problem. This method is compared to Shapiro filter, Mellor-Ezer-Oey method and the procedure of Martinho and Batteen on three idealized 1-dimensional test cases and for three grids in the Adriatic sea.

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