

Institut Ruđer Bošković  
ZAVOD ZA TEORIJSKU FIZIKU  
Bijenička c. 54  
ZAGREB, HRVATSKA

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SEMINAR ZAVODA ZA TEORIJSKU FIZIKU  
(Zajednički seminari Zavoda za teorijsku fiziku,  
Zavoda za eksperimentalnu fiziku i Zavoda za teorijsku fiziku PMF-a)

**Geometry of turbulence: a stroll through 61,506  
dimensions**  
**(A guided tour through [ChaosBook.org/tutorials](http://ChaosBook.org/tutorials))**

**Prof. Predrag Cvitanović**  
Center for Nonlinear Science, School of Physics,  
Georgia Institute of Technology, Atlanta

*Datum: ponedjeljak, 25. svibnja 2009.*

*Vrijeme : 15:00 sati c.t.*

*Mjesto: IRB, predavaonica III krila*

**Sažetak:**

In the world of moderate Reynolds number, everyday turbulence of fluids flowing across planes and down pipes a velvet revolution is taking place. Experiments are almost as detailed as the numerical simulations, DNS is yielding exact numerical solutions that one dared not dream about a decade ago, and dynamical systems visualization of turbulent fluid's state space geometry is unexpectedly elegant.

We shall take you on a tour of this newly breached, hitherto inaccessible territory. Mastery of fluid mechanics is no prerequisite, and perhaps a hindrance: the talk is aimed at anyone who had ever wondered why - if no cloud is ever seen twice - we know a cloud when we see one? And how do we turn that into mathematics?

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