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

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

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?

Voditeljica seminara: Larisa Jonke
(larisa@irb.hr)