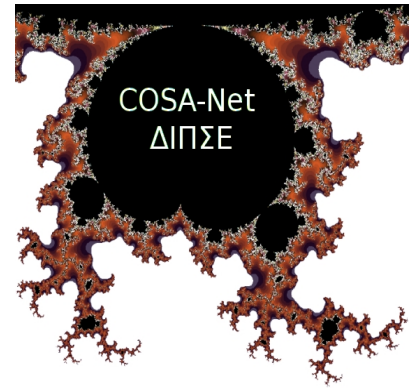




## Workshop

### "Nonlinear Dynamics and Complex Systems"

NCSR "Demokritos"  
Athens,  
December 21, 2018



## Tentative Program

Friday, 21/12/2018

- 9:50-10:00 Introduction (Chair: M. Axenidis)**  
**10:00 -10:30 Spyros Papageorgiou (NCSR "Demokritos")**  
- **Multiscale nature of collinearity in embryonic HOX gene cluster activation**  
**10:30-11:00 Emmanuel Floratos (Univ. of Athens)**  
- **Matrix quantization of turbulence**  
**11:00-11:30 Yannis Almirantis (NCSR "Demokritos")**  
- **Introduction of 'Generalized Genomic Signatures' for the quantification of neighbour preferences leads to taxonomy- and functionality-based distinction among sequences**  
**11:30-12:00 Coffee Break**  
**12:00-12:30 Astero Provata (NCSR "Demokritos")**  
- **Selforganization in partial synchronization**  
**12:30-13:00 Konstantinos Karamanos (Univ. Of West Attica)**  
- **Measuring the Uncomputable: Block-entropy analysis by lumping, automaticity and applications**  
**13:00-13:30 Avadh Behari Saxena (Los Alamos Nat. Lab., USA)**  
- **Skyrmions, Merons & Monopoles in Chiral Magnets**

**13:30-15:00 Lunch Break**

**Chair: Y. Almirantis**

- 15:00-15:30 George Papaioannou (ADMIE)**  
- **Extreme events in financial and energy markets**  
**15:30-16:00 Stamatis I. Nicolis (Univ. of Tours, France)**  
- **Probing the measure for stochastic magnets through their moment hierarchy: The challenges for closure**  
**16:00-16:30 Coffee Break**  
**16:30-17:00 Vassilios Constantoudis (NCSR "Demokritos")**  
- **Complexity in Nanotechnology**  
**17:00-17:30 Dimitris Polychronopoulos (Genomics England, UK)**  
- **100K Genomes Project: Bringing Whole Genome Sequencing (WGS) into routine healthcare**

**17:30 @ End**

---