



Institute for research in fundamental sciences (IPM)

SCHOOL OF PHYSICS

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### **Workshop on Physics of Polymers and Biopolymers**

24 October 2013

School of Physics, IPM, Tehran

This workshop was intended to provide a series of lectures on basic physics as well as advanced research aspects of polymers and biopolymers for graduate students, postdocs and other active researchers in the areas related to Soft Matter, Biological and Statistical Physics. Speakers included distinguished researchers from the Iranian physics community as well as two senior lecturers (V. Morozov and Y. Mamasakhlisov) from the Yerevan State University, Armenia. The lectures covered various aspects of polymer physics including basic theory of neutral and charged polymers and their applications, mechanics and elasticity of biopolymers such as DNA especially in nano-confinement, complexes of DNA with proteins and nano-particles as manifested most notably in chromatin, RNA folding phenomena, electrostatics of charged polymers and charged polymer brushes and bundles, as well as dynamics of single polymers and their translocation through nano-pores. The workshop was organized in conjunction with the "2nd IPM Conference on Soft Matter, Biological and Statistical Physics" that was held on 25 Oct 2013. Both activities were attended by a relatively large number of participants (more than around 120 in each case), mostly being graduate students, postdoctoral and other young researchers.

Further information regarding this workshop can be found at:

[http://physics.ipm.ac.ir/conferences/statphys2\\_workshop/](http://physics.ipm.ac.ir/conferences/statphys2_workshop/)

#### **Organizers:**

- M. Ghodrat, IPM
- L. Javidpour, IPM
- A. Naji, IPM