

# Seminar



## **Prof. Hossein Fazli**

*fazli@iasbs.ac.ir*

Institute for Advanced Studies in Basic Sciences (IASBS),  
Department of Physics, Zanzan, Iran

### **Novelties arising from the interplay between energetic and entropic effects in systems of polymers and polyelectrolytes**

Combination of highly anisotropic shape of stiff macromolecules and simultaneous presence of short- and long-range interactions in the system is known that causes numerous interesting phenomena. Very rich phase behavior of charged stiff polymers in the presence of multivalent salt, dependence of polyelectrolyte brushes thickness on mono- and multivalent salt concentration, salt-induced aggregation of stiff polyelectrolytes, anomaly in obstructed diffusion dynamics of stiff polymers and rich phenomenon of polymer translocation through nanoscale channels are examples of such phenomena. In this seminar, some systems in the mentioned category will be introduced and results of some recently published works in our group will be presented. Following comments and discussions are more than appreciated.

**Wednesday, September 28, 14h15**

**Hörsaal Makromolekulare Chemie, Stefan-Meier-Str. 31**

Contact: Barbara Heck, IRTG Soft Matter Science  
Tel +49 761 203 97778 Email [softmattergraduate@uni-freiburg.de](mailto:softmattergraduate@uni-freiburg.de)

[www.softmattergraduate.uni-freiburg.de](http://www.softmattergraduate.uni-freiburg.de)