

**ESI SENIOR RESEARCH FELLOW  
LECTURE COURSE  
Summer Term 2015**

The Erwin Schrödinger International Institute of Mathematical Physics (ESI) of the University of Vienna offers the following Lecture Course held by a Senior Research Fellow in residence during the Summer Term 2015:

**Soft matter physics**

**Primoz Zihelr** (U Ljubljana)

**Lecture Course (260129 VO): March to June 2015**

Lectures: Monday, 10:30 - 12:00 hrs

Problem sessions: Monday 12:15 - 13:00 hrs

Course website: <http://www.esi.ac.at/activities/events/2015/soft-matter-physics>

Venue: ESI, Schrödinger Lecture Hall

Content:

The one-semester course in theoretical physics of soft condensed matter physics aims to provide a broad review the phenomena and the concepts characteristic of soft matter, covering selected topics in the theory of liquid state, liquid crystals, polymers, colloids, and amphiphile assemblies. The course builds on the equilibrium thermodynamics and statistical mechanics as well as on classical elasticity. The theoretical topics introduced are illustrated by problems discussed in the tutorials, giving the students some hands-on experience.

Joachim Schwermer

Director