# **Experimental Techniques**

# in NanoScience & BioPhysics

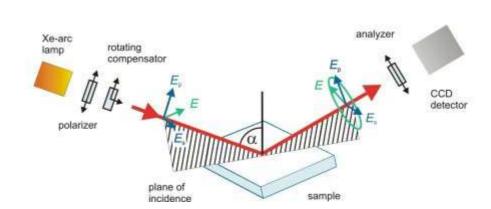
zu VF (Vertiefungsfächer)

- "Bio/Medical Physics"
- "Nanostructures"
- "Kondensed Matter"
  (Diplom or Bachelor/Master)

Prof. Dr. Frank Schreiber

Dr. Fajun Zhang

Dr. Alexander Gerlach



## Every Wednesday 15:15 - 17:00 in C9A03 - First lecture 17.10.2012

The language of the course will be English, but where necessary a German translation will be offered.

### From the contents:

- 1. Spectroscopic techniques
- 2. Microscopic techniques
- 3. Scattering techniques
- 4. Preparation techniques
- 5. Vacuum technology

The course will provide a background for experimental work, including for each technique a theoretical basis and explanation of the experimental technology. A common perspective on how to design and analyze experiments will be offered. Application examples will be drawn from nano-science and bio-physics, but also other areas will be included in the discussion.

#### Further information:

http://www.soft-matter.uni-tuebingen.de

email: frank.schreiber@uni-tuebingen.de, Tel. 78663/office C7A35

Literature: The handouts (Skript from the homepage) will be the basis. There are also many textbooks on the subject; see, e.g., R. Winter / F. Noll, Methoden der Biophysikalischen Chemie, Teubner. The course can be used to obtain the corresponding ECTS credit points.