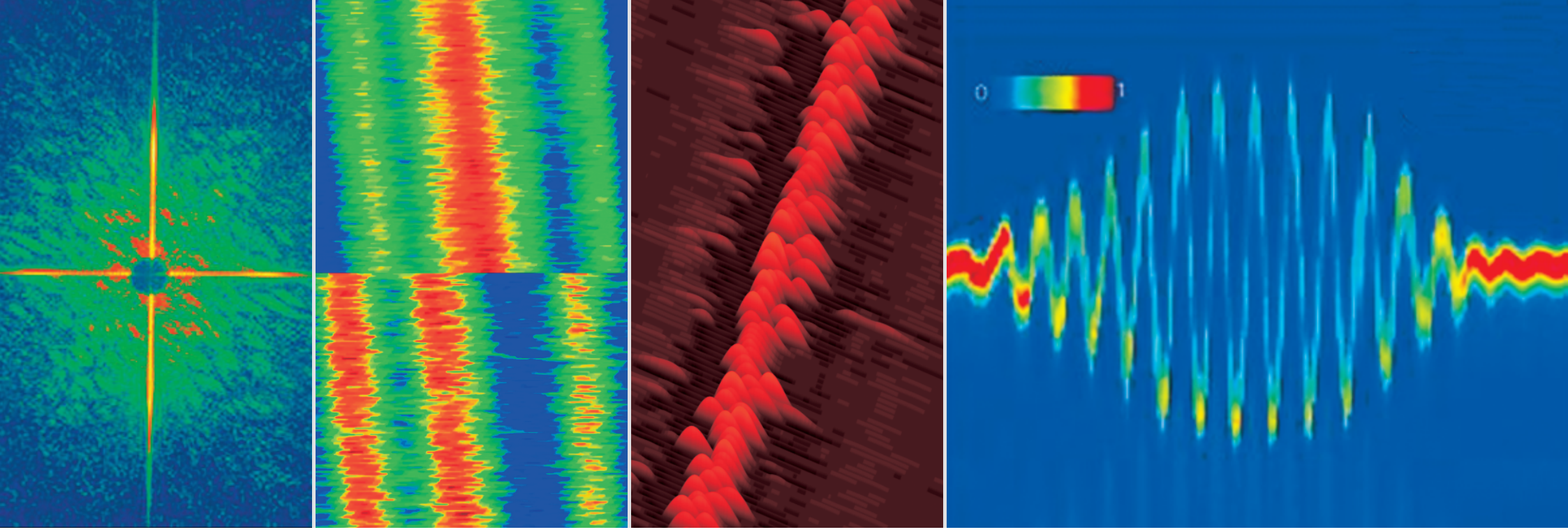


503. WILHELM AND ELSE HERAEUS SEMINAR

FREE-ELECTRON LASERS: FROM FUNDAMENTALS TO APPLICATIONS

Free-electron lasers (FEL) have recently received a lot of attention, mainly due to the development of short-wavelength free-electron lasers such as FLASH in Hamburg operating in the extended UV (XUV), and the worldwide first X-ray free-electron laser LCLS in Stanford, USA. Yet, free-electron lasers in the longer-wavelength infrared and terahertz regions have been operating already for two decades and contributed a wealth of results in various scientific fields.

The goal of the seminar is to

- Familiarize students and young postdocs with the basic physical concepts and mechanism of FELs.
- Discuss the spectacular possibilities that recently developed short-wavelength FELs offer for research in fields like biology, atomic and solid state physics.
- Present highlights of research which long-wavelength FELs have contributed to in the past decade in the fields of solid state and molecular physics.

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Confirmed Speakers:

- Andrea Cavalleri (MPSD, Hamburg)
- Henry Chapman (CFEL, Hamburg)
- Thomas Cowan (HZDR, Dresden)
- Lukas M. Eng (TU Dresden)
- A.F.G. van der Meer (FELIX, Nieuwegein, NL)
- Gerard Meijer (FHI, Berlin)
- Thomas Möller (TU Berlin)
- Ben N. Murdin (Univ. Surrey, U.K.)
- Wolfgang Schleich (Univ. Ulm)
- Theo Rasing (Univ. Nijmegen, NL)
- Peter Schmüser (DESY, Hamburg)
- Jochen Schneider (DESY, Hamburg)
- Simone Techert (MPIBPC, Göttingen)
- Sven Toleikis (DESY, Hamburg)
- Luke Wilson (Univ. Sheffield, U.K.)
- Stephan Winnerl (HZDR, Dresden)
- Marc Vrakking (MBI, Berlin)

Organizers:

- Josef Feldhaus (DESY, Hamburg)
- Michael Gensch (HZDR, Dresden)
- Manfred Helm (HZDR, Dresden)

PHYSIKZENTRUM BAD HONNEF
APRIL 10 – 13, 2012

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