

HITEC Methods Day

Title: Imaging Methods

Date: 1st July 2016

Time: 9:15 –16:30

Location: [Forschungszentrum Jülich](#) ► Bld. 02.16, Technikum

In many scientific research areas, there is a need to obtain spatially resolved information. This can be spatially resolved information about the materials or devices studied but also about some part of our atmosphere or about the human brain. To obtain spatial information, various methods exist, some of which are specific to the research area, while some are applicable to a wide range of cases such as for instance thermography imaging. The purpose of the HITEC day Imaging Methods is to give you an overview over methods that exist to perform measurements with spatial resolution. Most of these measurements are available at an institute at the Forschungszentrum Jülich. The scope of methods is rather diverse, so there will be talks that may not be of immediate relevance to an individual PhD topic but rather give an impression of how other research areas use imaging methods for their daily work.

You will learn about:

- Imaging methods that yield spatially resolved information on some specimen

Contents:

- Microscopy and spectroscopy with electrons
- Atom probe tomography
- Studying the human brain with the help of magnetic resonance imaging
- 3-D tomographic reconstruction of atmospheric temperature and trace gas distribution from IR images
- Imaging methods for solar cell characterization

Who should attend:

HITEC Ph.D.-fellows;
Postgraduate-, Ph.D.- and postdoctoral fellows from the fields of energy and climate research

HITEC Days

HITEC Days are an inherent part of the graduate school Helmholtz Interdisciplinary Doctoral Training in Energy and Climate Research (HITEC). They devote a whole day to a method or a scientific topic with lectures and discussions. The methodological days serve to encourage scientific interdisciplinarity and will enable the PhD students to extend their range of methods with respect to their own scientific work. HITEC Days always end with a 'Get together', some snacks and drinks. HITEC Days are open for HITEC Ph.D. students and other interested young scientists.