



- |                       |                     |                 |
|-----------------------|---------------------|-----------------|
| <b>1</b> Entrance     | <b>3</b> Auditorium | <b>5</b> Dinner |
| <b>2</b> Registration | <b>4</b> Library    | <b>6</b> MPI-IS |

# StAR-M 2014

Programme

# STEM

Stuttgart Center for Electron Microscopy



## Stuttgart Atomic Resolution Microscopy Symposium

15 - 16 December 2014



MAX-PLANCK-GESELLSCHAFT



## Monday 15 December

**8:00-10:00** Registration

**9:00** Reception

**10:00-11:00** Inauguration Ceremony for the  
JEOL ARM200F TEMs at StEM  
Welcoming Addresses

**11:00-12:30** Scientific Programme

**H. Sawada**

*High Resolution Imaging by Aberration Corrected Microscopy*

**M. Haider**

*Advanced Instrumentation for High Resolution TEM and STEM*

**N. Browning**

*Quantitative In-Situ (S)TEM and DTEM: From High Spatial Resolution  
to High Temporal Resolution*

**12:30-14:00** Lunch and TEM Lab Tours

**14:00-15:30** Scientific Programme

**Q. Ramasse**

*Atom-by-Atom Characterization and Defect Engineering in  
Low-Dimensional Materials*

**A. Kirkland**

*Structural Studies of Defects and Defect Dynamics in Graphene*

**J. Meyer**

*Recent Developments in the Manipulation and Analysis of Radiation  
Sensitive 2-D Materials*

**15:30-16:00** Coffee Break and TEM Lab Tours

**16:00-17:30** Scientific Programme

**K. Suenaga**

*Low Voltage Electron Microscopy for Single Atom Spectroscopy*

**J. Etheridge**

*Quantitative STEM - Development of Methods and Applications to  
Materials Problems*

**C. Koch**

*Multiple-Scattering Assisted Electron Microscopy*

**18:00** Symposium Dinner



# StAR-M 2014 Programme



## Tuesday 16 December

**9:00-10:30** Scientific Programme

**P. Batson**

*Plasmonic Response and Forces in Sub-Nanoscale Objects*

**G. Botton**

*EELS at High Energy/Spatial Resolution for Plasmonics and Oxides with Highly-Correlated Electrons*

**M. Kociak**

*Nanoscale Optics with Fast Electrons?*

**10:30-11:00** Coffee Break and TEM Lab Tours

**11:00-12:30** Scientific Programme

**M. Watanabe**

*Theoretical Approaches for Quantification of Atomic Resolution X-ray Maps in Aberration-Corrected STEM*

**P. Schattschneider**

*EMCD - Magnetic Chiral Dichroism in the Electron Microscope*

**J. Verbeeck**

*Progress and Challenges in Electron Vortex Research*

**12:30-14:00** Lunch and TEM Lab Tours

**14:00-15:30** Scientific Programme

**R. Dunin-Borkowski**

*Towards Three-Dimensional Characterization of Magnetic Moments Inside Individual Nanocrystals in the TEM*

**M. Lehmann**

*Methodical Progress in Electron Holography*

**M. Hytch**

*In-Situ Electron Holography for the Measurement of Fields*

**15:30-16:00** Coffee Break and TEM Lab Tours

**16:00-17:30** Scientific Programme

**S. Pennycook**

*STEM-EELS Imaging of Complex Oxides*

**J. Mayer**

*How can Atomic Resolution TEM Contribute to the Development of New Steels?*

Closing Remarks

