



International Max Planck Research School

# Functional Interfaces in Physics and Chemistry

*Block course on*

## Fundamentals of solids and their interfaces and surfaces

When? 14 morning lectures in March/April 2017. **Please see days below.**

Where? Fritz Haber Institute, Richard Willstätter House, Faradayweg 10.

**Exception:** Friday, 31 March. CP Seminar room, Faradayweg 16. **Please see below.**

Topic This basic course provides an introduction into the fundamentals of solids and their surfaces and interfaces.

**This course is open to all---everybody is invited to attend!**

	Monday, 27 March Willstätter House Faradayweg 10	Tuesday, 28 March Willstätter House Faradayweg 10	Thursday, 30 March Willstätter House Faradayweg 10	Friday, 31 March CP Seminar room Faradayweg 16
9:00-10:30h	Karsten Horn (FHI): <i>Electronic structure of solids and surfaces: an experimentalist's view</i>	<i>Discussion meeting</i> Mid-term talks: Christian Stemmler  PhD talks: Maria Heenemann Frieder Kettemann Nora Salas-Illanes Lukas Marsoner-Steinkasserer	Beate Paulus (FU): <i>Symmetry analysis of solids and their surfaces</i>	Mario Dähne (TU): <i>Nanostructures at surfaces: Formation, properties and atomic-scale analysis</i>
11:00-12:30h	Luca Ghiringhelli (FHI): <i>Big-data analytics in materials science</i>		Thomas Risse (FU): <i>Surface spectroscopies</i>	Mario Dähne (TU): <i>Nanostructures at surfaces: Selected examples</i>

	Monday, 03 April Willstätter House Faradayweg 10	Tuesday, 04 April Willstätter House Faradayweg 10	Thursday, 06 April Willstätter House Faradayweg 10
9:00-10:30h	Klaus Rademann (HU): <i>Basics of partition functions and transition states</i>	Klaus Rademann (HU): <i>Adsorption phenomena: macroscopic observables and microscopic interpretation</i>	Peter Feulner (TU München): <i>Fundamentals of temperature-programmed desorption (TPD)</i>
11:00-12:30h	Markus Heyde (FHI): <i>Surface characterization by atomic force microscopy</i>	Karsten Horn (FHI): <i>Physics of semiconductor surfaces and interfaces</i>	<b>11:30h:</b> Katrin Domke (MPI for Polymer Science, Mainz): <i>Optical near-field spectroscopy of surfaces</i>



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