# Surface Science Division Fachverband Oberflächenphysik (O)

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## **Overview of Invited Talks and Sessions**

(lecture rooms HSZ 02, SCH A01, SCH A118, SCH A215, SCH A216, SCH A315, and SCH 251; Poster P2)

### **Invited Talks**

O 2.1	Mon	10:15-11:00	HSZ 02	Surface Science from Hours to Attoseconds: Mind the Gap —
0.01				•MICHAEL HORN-VON HOEGEN
O 9.1	Mon	14:00-14:45	HSZ 02	Surface-confined coordination chemistry with porphyrins and phthalo-
				cyanines — •J. Michael Gottfried
O 16.1	Tue	9:30 - 10:15	HSZ 02	Electron Transport through Single Atoms and Molecules: an STM's
				View — •Jörg Kröger
O 23.1	Tue	14:00-14:45	HSZ 02	Surfaces and Atomic Nanostructures - Model Systems for Spec-
				troscopy of Confined Interacting Electrons — • JÖRG SCHÄFER
O 28.1	Wed	9:30 - 10:15	HSZ 02	Catalytic Autothermal Reforming of Renewable Fuels at Millisecond
				Times — •Lanny Schmidt
O 35.1	Wed	14:00-14:45	HSZ 02	Engineering surfaces, interfaces and structural phases to tailor mag-
				netic properties — •Jürgen Fassbender
O 43.1	Thu	9:30-10:15	HSZ 02	Measuring spin polarization vectors with ARPES — •JÜRG OSTER-
				WALDER, HUGO DIL, FABIAN MEIER, JORGE LOBO-CHECA, LUC PATTHEY,
				VLADIMIR N. PETROV
O 50 1	Thu	14.00 - 14.45	HSZ 02	Si-based spintronics from first principles — $\bullet$ MAHBURE HORTAMANI
0.61.1	Thu Tri	$10.15 \ 11.00$	HSZ 02	First principles approaches towards organic film growth
0 01.1	1.11	10.15-11.00	1152 02	AMPROCH DRAVI DETER DUSCUNIC DMITRI NAROV
0 00 1	<b>п</b> ·	19 90 14 15	1107 00	AMBROSCH-DRAXL, FEIER FUSCHNIG, DMITRII NABOR
O 68.1	Fri	13:30-14:15	HSZ 02	Surface Structure Analysis – Present Status and Future – $\bullet$ KLAUS
_				HEINZ
O 69.1	Fri	14:15-15:00	HSZ 02	Transient Electronic Structure and Insulator-to-Metal Transitions
				Probed by Time-resolved Photoemission Spectroscopy $-\bullet$ MARTIN
				Wolf

#### Invited talks of the joint symposium SYAI

See SYAI for the full program of the Symposium.

SYAI 1.1	Thu	15:00 - 15:30	SCH 251	Insights and Progress in Density Functional Theory — PAULA PAULA
				Mori-Sanchez, Aron Cohen, •Weitao Yang
SYAI 1.2	Thu	15:30 - 16:00	SCH 251	Quasiparticle energy calculations in a new light: from defects in
				semiconductors to the $f$ -electron challenge — $\bullet$ PATRICK RINKE
SYAI 1.3	Thu	16:00-16:30	SCH 251	LDA+DMFT approach to excitations spectrum in Half-Metallic
				Ferromagnets — •Alexander Lichtenstein
SYAI 1.4	Thu	17:00-17:30	SCH 251	Insight and prediction of material properties from ab initio calcu-
				lations of electronic excitations — •LUCIA REINING, MATTEO GATTI,
				Ralf Hambach, Christine Giorgetti
SYAI 1.5	Thu	17:30 - 18:00	SCH 251	Local excitations in strongly interacting charge-transfer insulators:
				Frenkel excitons within $TD-LDA+U$ and strong coupling theory —
				•Wei Ku
SYAI 1.6	Thu	18:00 - 18:30	SCH 251	m Electron tunneling and transport at molecular junctions
				•Roberto Car

Sessions

#### O 1.1-1.3 Sun 16:00-18:30HSZ 04Tutorial (Walter Pfeiffer, Christoph Lienau, Michael Bauer) O 2.1-2.1 Mon 10:15 - 11:00HSZ 02Invited Talk (Michael Horn-von Hoegen) O 3.1-3.7 Mon 11:15-13:00 SCH A01 Oxides and insulators I O 4.1-4.7 Mon 11:15-13:00 SCH A118 Metal substrates: Adsorption of organic / bio molecules I O 5.1-5.7 Mon 11:15-13:00 SCH A215 Nanostructures at surfaces: Wires, tubes O 6.1-6.7 Mon 11:15-13:00SCH A216 Electronic structure I O 7.1–7.7 Mon 11:15-13:00**SCH A315** Semiconductor substrates O 8.1-8.5 Mon 11:15-12:45SCH 251 Focused Session: Epitaxial Graphene I O 9.1-9.1 Mon 14:00-14:45HSZ 02Invited Talk (J.Michael Gottfried) O 10.1-10.7 Mon 15:00-16:45SCH A01 Oxides and insulators II O 11.1-11.7 Mon 15:00-16:45**SCH A118** Metal substrates: Adsorption of organic / bio molecules II O 12.1-12.6 SCH A215 Nanostructures at surfaces: Dots, particles, clusters I (mag-Mon 15:00 - 16:30netic) 15:00-16:45O 13.1-13.7 Mon SCH A216 **Electronic structure II** O 14.1-14.7 15:00-16:45SCH A316 Organic, polymeric, biomolecular films - also with absorbates Mon Ι O 15.1-15.5 SCH 251 Focused Session: Epitaxial Graphene II Mon 15:00 - 16:30Invited Talk (Jörg Kröger) 9:30-10:15 HSZ 02O 16.1–16.1 Tue O 17.1-17.10 Tue 10:30-13:00 SCH A01 Oxides and insulators III O 18.1-18.9 Tue 10:30-12:45SCH A118 Metal substrates: Adsorption of organic / bio molecules III O 19.1-19.9 Tue SCH A21510:30-12:45Nanostructures at surfaces: Arrays O 20.1-20.10 Tue 10:30-13:00 SCH A216 Nano-optics of metallic and semiconducting nanostructures (time resolved) O 21.1-21.6 Tue 10:30-12:00 SCH A316 Methods: Electronic structure theory I O 22.1-22.8 Tue 10:30-13:00SCH 251 Focused Session: Epitaxial Graphene III O 23.1-23.1 HSZ 02Invited Talk (Jörg Schäfer) Tue 14:00-14:45O 24.1-24.5 Tue SCH A01 Methods: Molecular simulations and statistical mechanics 15:00-16:15O 25.1-25.5 Tue 15:00-16:15 SCH A118 Surfaces and films: forces, structure and manipulation O 26.1-26.7 Tue 15:00-16:45SCH A215 Nanostructures at surfaces: Dots, particles, clusters II (SPM) O 27.1-27.122 Tue P2Poster Session I (Methods: Scanning probe techniques; 18:30 - 21:00Methods: Atomic and electronic structure; Methods: Molecular simulations and statistical mechanics; Oxides and Insulators: Clean surfaces; Oxides and Insulators: Adsorption; Oxides and Insulators: Epitaxy and growth; Semiconductor substrates: Clean surfaces; Semiconductor substrates: Epitaxy and growth; Semiconductor substrates: Adsorption; Nano- optics of metallic and semiconducting nanostructures; Electronic structure; Methods: Electronic structure theory; Methods: other (experimental); Methods: other (theory); Solutions on surfaces; Epitaxial Graphene; Surface oder interface magnetism; Phase transitions; Time-resolved spectroscopies) O 28.1-28.1 Wed 9:30-10:15 Invited Talk (Lanny Schmidt) HSZ 02O 29.1-29.9 Wed 10:30-12:45SCH A01 Nanostructures at surfaces: preparation O 30.1-30.10 Wed 10:30-13:00 SCH A118 Metal substrates: Adsorption of organic / bio molecules IV O 31.1-31.8 Wed 10:30-12:30 SCH A216 Nano-optics of metallic and semiconducting nanostructures (theory) Surface or interface magnetism O 32.1-32.8 Wed 10:30-12:30 **SCH A315** O 33.1-33.6 Wed 10:30-12:00**SCH A316** Methods: Electronic structure theory II O 34.1-34.8 Wed 10:30-13:00 SCH 251 Focused Session: Epitaxial Graphene IV O 35.1-35.1 Wed 14:00-14:45HSZ 02Invited Talk (Gaede Prize) (Jürgen Fassbender) O 36.1-36.7 Wed 15:00-16:45SCH A01 Particles and clusters O 37.1-37.10 Wed SCH A118 Metal substrates: Adsorption of organic / bio molecules V 15:00-17:30O 38.1-38.10 Wed 15:00-17:30 SCH A216 Nano-optics of metallic and semiconducting nanostructures (experiments I) O 39.1-39.10 Wed 15:00 - 17:30SCH A315 Metal substrates: Solid-liquid interfaces O 40.1-40.10 Wed 15:00-17:30 SCH A316 Methods: Scanning probe techniques I O 41.1-41.10 Wed 15:00-17:30 SCH 251 Ab-initio approaches to excitations in condensed matter I

O 42.1–42.126	Wed	17:45-20:30	P2	Poster Session II (Nanostructures at surfaces: arrays; Nanos- tructures at surfaces: Dots, particles, clusters; Nanostruc-
				tures at surfaces: Other; Nanostructures at surfaces: Wires,
				tubes; Metal substrates: Adsorption of U and/or H; Metal
				substrates: Clean surfaces; Metal substrates: Adsorption of
				forganic/bio molecules; Metal substrates: Sond-inquid inter-
				Motal substrates: Enitaxy and growth: Hotorogonoous gatal
				vsis: Surface chemical reactions: Ab-initio approaches to ev-
				citations in condensed matter: Organic polymeric biomolec-
_				ular films- also with adsorbates; Particles and clusters)
O 43.1–43.1	Thu	9:30-10:15	HSZ 02	Invited Talk (Jürg Osterwalder)
O 44.1–44.10	Thu	10:30-13:00	SCH A118	Metal substrates: Adsorption of organic / bio molecules VI
O 45.1–45.10	Thu	10:30-13:00	SCH A215	Heterogeneous catalysis
O 46.1–46.10	Thu	10:30-13:00	SCH A315	Time-resolved spectroscopies I
O 47.1–47.8	Thu	10:30-12:30	SCH A316	Methods: Scanning probe techniques II
O 48.1–48.7	Thu	10:30-13:00	HSZ 02	Focused Session: Spin-Orbit Interaction at Surfafces: From
0 10 1 10 10	-	10.00.10.00	COTT OF 1	the Rashba Effect to Topological States of Matter I
0 49.1–49.12	Thu	10:30-13:30	SCH 251	Ab-initio approaches to excitations in condensed matter II
O 50.1–50.1	Thu	14:00-14:45	HSZ 02	Invited Talk (Mahbube Hortamani)
O 51.1–51.12	Thu	16:15-19:15	SCH A01	Surface chemical reactions I
O 52.1–52.17	Thu	15:00-19:15	SCH A118	Metal substrates: Adsorption of organic / bio molecules VII
O 53.1–53.14	Thu	15:00-18:30	SCH A215	Nanostructures at surfaces: Dots, particles, clusters III
O 54.1–54.14	Thu	15:00-18:30	SCH A216	Nano-optics of metallic and semiconducting nanostructures
0 55 1-55 5	Thu	15.00-16.15	SCH A 215	Time-resolved expertescopies II
0.561 - 5617	Thu	15.00 - 10.15 15.00 - 10.15	SCH A 316	Motal substratos: Epitaxy, growth and adsorbatos
0.571 - 57.12	Thu	15.00 - 19.10 15.00 - 10.00	HSZ 02	Focused Session: Spin-Orbit Interaction at Surfaces: From
0 01.1 01.12	Tun	15.00 15.00	1102 02	the Bashba Effect to Topological States of Matter II
0.58	Thu	15.00-18.30	SCH 251	SVAI: Ab-initio approaches to excitations in condensed mat-
0.30	Tun	15.00-18.50	5011 251	ter
O 59	Thu	19:30 - 20:00	HSZ 02	General Meeting of the Surface Science Division
O 60.1–60.4	Thu	20:00 - 21:00	HSZ 02	Post Deadline Session followed by Surface Science "get-
				together"
O 61.1–61.1	Fri	10:15-11:00	HSZ 02	Invited Talk (Claudia Ambrosch-Draxl)
O 62.1–62.7	Fri	11:15-13:00	SCH A01	Surface chemical reactions II
O 63.1–63.7	Fri	11:15-13:00	SCH A118	Semiconductor substrates: Adsorption
O 64.1–64.6	Fri	11:15-12:45	SCH A215	Metal substrates: Adsorption of inorganic molecules
O $65.1-65.7$	Fri	11:15-13:00	SCH A315	Time-resolved spectroscopies III
O 66.1–66.6	Fri	11:15-12:45	SCH A316	Organic, polymeric, biomolecular films – also with absorbates II
O 67.1–67.6	Fri	11:15 - 12:45	SCH 251	Ab-initio approaches to excitations in condensed matter III
O 68.1–68.1	Fri	13:30 - 14:15	HSZ 02	Invited Talk (Klaus Heinz)
O 69.1–69.1	Fri	14:15-15:00	HSZ 02	Invited Talk (Martin Wolf)

## Annual General Meeting Surface Science Division

Thursday 19:30–20:00 HSZ 02  $\,$ 

- Report of the Chairman of the DPG Surface Science Division
- Miscellaneous

#### Notes

Poster Sessions O27 (Tuesday, 18:30-21:00), O42 (Wednesday, 17:45-20:30) in room P2. Post Deadline Session O60 on Thursday 20:00-21:00, in HSZ 02, followed by the Surface Science "get-together".