

## Vacuum Science and Technology Division Fachverband Vakuumphysik und Vakuumtechnik (VA)

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### Overview of Invited Talks and Sessions

(Lecture hall H2)

#### Invited Talks

VA 1.1	Mon	10:00–10:30	H2	<b>Deterministic and stochastic numerical approaches in Rarefied Gas Dynamics</b> — ●STYLIANOS VAROUTIS, CHRISTOS TANTOS
VA 1.2	Mon	10:30–11:00	H2	<b>Deterministic modeling of neutral gas flows of tokamak nuclear fusion devices</b> — ●CHRISTOS TANTOS, STYLIANOS VAROUTIS
VA 1.3	Mon	11:00–11:30	H2	<b>Stochastic Simulation of Mercury Diffusion Pumps Using Direct Simulation Monte Carlo</b> — ●TIM TEICHMANN, CHRISTIAN DAY, THOMAS GIEGERICH
VA 2.1	Mon	11:45–12:15	H2	<b>IFMIF-DONES gas flow modelling using Test Particle Monte-Carlo Simulations</b> — ●VOLKER HAUER
VA 2.2	Mon	12:15–12:45	H2	<b>Current design status and outgassing considerations for the vacuum system of the Einstein Telescope</b> — ●KATHARINA BATTES, CHRISTIAN DAY, STEFAN HANKE

#### Invited talks of the joint symposium SKM Dissertation Prize 2021 (SYSD)

See SYSD for the full program of the symposium.

SYSD 1.1	Mon	10:00–10:25	Audimax 2	<b>Avoided quasiparticle decay from strong quantum interactions</b> — ●RUBEN VERRESEN, RODERICH MOESSNER, FRANK POLLMANN
SYSD 1.2	Mon	10:25–10:50	Audimax 2	<b>Co-evaporated Hybrid Metal-Halide Perovskite Thin-Films for Optoelectronic Applications</b> — ●JULIANE BORCHERT
SYSD 1.3	Mon	10:55–11:20	Audimax 2	<b>Attosecond-fast electron dynamics in graphene and graphene-based interfaces</b> — ●CHRISTIAN HEIDE
SYSD 1.4	Mon	11:20–11:45	Audimax 2	<b>The thermodynamics of stochastic systems with time delay</b> — ●SARAH A.M. LOOS
SYSD 1.5	Mon	11:50–12:15	Audimax 2	<b>First Results on Atomically Resolved Spin-Wave Spectroscopy by TEM</b> — ●BENJAMIN ZINGSEM

#### Prize talks of the joint Awards Symposium (SYAW)

See SYAW for the full program of the symposium.

SYAW 1.1	Wed	13:30–14:00	Audimax 1	<b>Organic semiconductors - materials for today and tomorrow</b> — ●ANNA KÖHLER
SYAW 1.2	Wed	14:00–14:30	Audimax 1	<b>PbTe/CdTe nanocomposite as an attractive candidate for room-temperature infrared detectors</b> — ●GRZEGORZ KARCEWSKI
SYAW 1.3	Wed	14:40–15:10	Audimax 1	<b>Fingerprints of correlation in electronic spectra of materials</b> — ●LUCIA REINING
SYAW 1.4	Wed	15:10–15:40	Audimax 1	<b>Artificial Spin Ice: From Correlations to Computation</b> — ●NAËMI LEO
SYAW 1.5	Wed	15:40–16:10	Audimax 1	<b>From microwave optomechanics to quantum transport – carbon nanotubes as highly versatile hybrid devices</b> — ●ANDREAS K. HÜTTEL

SYAW 1.6	Wed	16:20–16:50	Audimax 1	<b>Quantum spin dynamics of a spin-1/2 antiferromagnetic Heisenberg-Ising chain</b> — ●ZHE WANG
SYAW 1.7	Wed	16:50–17:20	Audimax 1	<b>Imaging the effect of electron transfer at the atomic scale</b> — ●LAERTE PATERA

### Invited talks of the joint symposium Spain as Guest of Honor (SYES)

See SYES for the full program of the symposium.

SYES 1.1	Wed	13:30–13:40	Audimax 2	<b>DFMC-GEFES</b> — ●JULIA HERRERO-ALBILLOS
SYES 1.2	Wed	13:40–14:10	Audimax 2	<b>Towards Phononic Circuits based on Optomechanics</b> — ●CLIVIA M. SOTOMAYOR TORRES
SYES 1.3	Wed	14:10–14:40	Audimax 2	<b>Adding magnetic functionalities to epitaxial graphene</b> — ●RODOLFO MIRANDA
SYES 1.4	Wed	14:45–15:15	Audimax 2	<b>Bringing nanophotonics to the atomic scale</b> — ●JAVIER AIZPURUA
SYES 1.5	Wed	15:15–15:45	Audimax 2	<b>Hydrodynamics of collective cell migration in epithelial tissues</b> — ●JAUME CASADEMUNT
SYES 1.6	Wed	15:45–16:15	Audimax 2	<b>Understanding the physical variables driving mechanosensing</b> — ●PERE ROCA-CUSACHS

### Sessions

VA 1.1–1.3	Mon	10:00–11:45	H2	<b>Rarefied gas flows and novel approaches for particle simulation</b>
VA 2.1–2.2	Mon	11:45–12:45	H2	<b>Vacuum technology: New developments and applications</b>
VA 3	Mon	14:00–15:00	MVVA	<b>Annual General Meeting</b>

### Annual General Meeting of the Vacuum Science and Technology Division

Monday 14:00–15:00 MVVA

- Bericht
- Wahl
- Verschiedenes