

Plenary Talks, Prize Talks, Plenary Special Talks, Tutorials, Joint Symposia: Berlin 2018

Plenary Talks (PLV)

Sun, 18:45–19:30	H 0105	Sunday Evening Lecture: PLV I: Next exit future: Is it them or us? — •RANGA YOGESHWAR
Mon, 08:30–09:15	H 0105	Plenary Talk: PLV II: Imaging Topological Electrons in Low Dimensions: from the Inorganic to the Organic — •MICHAEL F. CROMMIE
Mon, 14:00–14:45	H 0105	Plenary Talk: PLV III: Imaging and controlling nanoscale crystal growth in the transmission electron microscope — •FRANCES M. ROSS
Mon, 14:00–14:45	H 0104	Plenary Talk: PLV IV: Fast Parametric Interactions Between Superconducting Quantum Circuits — •RAYMOND W SIMMONDS
Tue, 08:30–09:15	H 0105	Plenary Talk: PLV V: Upside-Down and Inside-Out: Biomechanics of Cell Sheet Folding — •RAYMOND GOLDSTEIN
Tue, 17:30–18:15	H 0105	Plenary Talk: PLV VI: Resonant Inelastic X-Ray Scattering — •LUCIO BRAICOVICH and GIACOMO CLAUDIO GHIRINGHELLI
Wed, 08:30–09:15	H 0105	Plenary Talk: PLV VII: Nanoscale thermal imaging of dissipation in quantum systems — •ELI ZELDOV
Wed, 14:00–14:45	H 0105	Plenary Talk: PLV VIII: Quantum photonics using van der Waals heterostructures — •ATAC IMAMOGLU
Wed, 14:00–14:45	H 0104	Plenary Talk: PLV IX: Hairy Hydrodynamics — •ANETTE HOSOI
Wed, 20:00–21:00	Urania	Evening Talk: PLV X: Kollektive Dynamik in Sozialen Systemen: Netzwerke, Emotionen und Big Data — •FRANK SCHWEITZER
Thu, 08:30–09:15	H 0105	Plenary Talk: PLV XI: Emergent properties and functions of topological magnets — •YOSHINORI TOKURA
Thu, 14:00–14:45	H 0105	Plenary Talk: PLV XII: From Atomistic Simulations into the Mouse: Learning how to exploit bacterial adhesives as nanoscale probes to map the mechanical strain of tissue fibers. — •VIOLA VOGEL, SIMON ARNOLDINI, ALESSANDRA MOSCAROLI, MAMTA CHABRIA, MANUEL HILBERT, SAMUEL HERITIG, ROGER SCHIBLI, and MARTIN BEHE
Thu, 14:00–14:45	H 0104	Plenary Talk: PLV XIII: A significant raw material of the 21st century — •CLAUDIA DRAXL
Thu, 18:00–19:00	H 0105	Evening Talk: PLV XIV: Lise-Meitner-Lecture: Multiferroic Materials for a New Age — •NICOLA SPALDIN

Fri, 08:30–09:15	H 0105	Plenary Talk: PLV XV: How photons change the properties of matter: QED-TDDFT an ab initio framework for modeling Light-Matter interaction — •ANGEL RUBIO
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Prize Talks (PRV)

Mon, 13:15–13:45	H 1012	Prize Talk: PRV I: Fabrication and characterization of spin Hall nano-oscillators — •TONI HACHE, TILLMANN WEINHOLD, KAI WAGNER, NANA NISHIDA, SRI SAI PHANI KANTH AREKAPUDI, TOBIAS HULA, OLAV HELLWIG, and HELMUT SCHULTHEISS
Tue, 13:15–13:45	H 0105	Prize Talk: PRV II: Single-Atom Catalysis: An Atomic-Scale View — •GARETH PARKINSON
Wed, 13:15–13:45	H 0105	Prize Talk: PRV III: Ultrafast transmission electron microscopy — •SASCHA SCHÄFER
Thu, 13:15–13:45	H 0105	Prize Talk: PRV IV: Let's twist again -- Magnetic Skyrmions — •KARIN EVERSCHEID-SITTE

Plenary Special Talks (PSV)

Mon, 13:15–13:45	HE 101	Lunch Talk: PSV I: What Counts in Public Transportation — •JAN SABLATNIG
Mon, 13:15–13:45	H 0104	Lunch Talk: PSV II: Promoting academic Cooperation: The Alexander von Humboldt Foundation — •DAGMAR BROEMME
Tue, 13:15–13:45	HE 101	Lunch Talk: PSV III: Protecting Identities - as a Physicist in the Business for international Government Solutions — •SILKE BARGSTÄDT-FRANKE
Tue, 13:15–13:45	H 0104	Lunch Talk: PSV IV: FET Open: the European Innovation Council's exploratory engine for research on future disruptive technologies — •MARTIN LANGE
Wed, 13:15–13:45	HE 101	Lunch Talk: PSV V: Physics meets optical manufacturing — •ULRIKE FUCHS
Wed, 13:15–13:45	H 0104	Lunch Talk: PSV VI: The German Research Foundation -- overview and international programmes — •COSIMA SCHUSTER
Thu, 13:15–13:45	HE 101	Lunch Talk: PSV VII: Physicists in Consulting — •ROLF LOSCHEK
Thu, 13:15–13:45	H 0104	Lunch Talk: PSV VIII: Funding Opportunities Provided by the German

Tutorials (TUT)

Sun, 16:00–18:30, H 0104

[TUT 1: Dynamics and Fluctuations in Economic and Financial Markets
\(joint session SOE/DY/TUT/AKjDPG\)](#)

16:00 TUT 1.1 [Market microstructure: dynamics of the stock markets](#) — •THOMAS GUHR
16:50 TUT 1.2 [Maximum-entropy models in economics and finance](#) — •TIZIANO SQUARTINI
17:40 TUT 1.3 [350 years of puzzles in economics -- and a solution.](#) — •OLE PETERS

Sun, 16:00–18:25, H 0105

[TUT 2: Quantum Technologies \(joint session HL/TT/TUT\)](#)

16:00 TUT 2.1 [Quantum Technology - how is research funded?](#) — •GERD LEUCHS
16:35 5 min. break
16:40 TUT 2.2 [Superconducting Quantum Circuits](#) — •RUDOLF GROSS
17:15 TUT 2.3 [Josephson junction based interferometers and amplifiers](#) — •SEBASTIAN KEMPF
17:50 TUT 2.4 [Manipulation of quantum bits based on defect centres in diamond](#) — •OLIVER BENSON

Sun, 16:00–18:15, H 1012

[TUT 3: Spin-Orbit Coupling](#)

16:00 TUT 3.1 [Role of spin in the structure of matter and spin-related phenomena](#) — •MICHEL I. DYAKONOV
16:45 TUT 3.2 [From the Spin Hall Effect to the Quantum Spin Hall Effect](#) — •HARTMUT BUHMANN
17:30 TUT 3.3 [Spin Orbit Coupling in Doped Mott Insulators](#) — •ALESSANDRA LANZARA

Sun, 16:00–18:25, H 1058

[TUT 4: Semiconductor Optics \(joint session HL/TUT\)](#)

16:00 TUT 4.1 [Quantum dots for photonic quantum technologies](#) — •PETER MICHLER
16:45 5 min. break
16:50 TUT 4.2 [Non-classical light emission and superradiant emitter coupling in semiconductor nanolasers](#) — •FRANK JAHNKE
17:35 5 min. break
17:40 TUT 4.3 [Semiconductor spin-photon interfaces for quantum repeaters and cluster state generation](#) — •RUTH OULTON

Joint Symposia

[SYSD: Symposium SKM Dissertation-Prize 2018](#)

Mon, 11:00 – 12:40, HE 101

[SYID: Symposium Information Driven Materials Research](#)

Mon, 09:30–12:00, H 0105

[SYMS: Symposium Data-driven Methods in Molecular Simulations of Soft-Matter Systems](#)

Mon, 15:00–17:45, H 0105

[SYBS: Symposium Physics of Biological and Synthetic Active Matter](#)

Tue, 09:30–12:15, H 0105

[SYTO: Symposium Topology in Condensed Matter Physics](#)

Wed, 09:30–12:15, H 0105

[SYVC: Symposium Voltage Control of Functional Interfaces: Magneto-ionic Meet Memristive Systems](#)

Wed, 15:00–18:00, H 0105

[SYTH: Symposium Terahertz physics: toward probing and controlling of materials on the nanoscale](#)

Thu, 09:30–12:15, H 0105

[SYDM: Symposium 2D Materials](#)

Thu, 15:00–17:45, H 0105

[SYAM: Symposium Physics of Ancient Materials](#)

Fri, 09:30–12:15, H 0105