

QUANTSOL 2026 Winter Workshop – Timetable

Workshop Location: Mesnerhaus Rauris

Monday – Opening & Perovskites

Time	Speaker	Title
09:00–09:20	Opening – Cleber Marchiori & Bruno Ehrler	Welcome & framing
09:20–09:50	Erik Garnett	The Material Evolution Revolution
09:50–10:20	David Cahen	About Halide Perovskite Fables, Facts and What's in-between
10:20–10:40	Coffee break	
10:40–11:10	Daniel Abou-Ras	Why grain boundaries are always detrimental for the device performance of solar cells and dislocations are not (in some material systems)
11:10–11:40	Iris Fisher	Temperature Dependence of Diurnal Metastability of Perovskite Solar Cells
11:40–12:10	Norbert Koch	Determination of the Voc-generating interfaces within perovskite-based solar cells
17:00–17:30	Petra Cameron	Are Mobile Ions Bad for Perovskite Solar Cells?
17:30–18:00	Carsten Deibel	Recombination rates and voltage losses of perovskite solar cells under steady state conditions
18:00–18:30	Bruno Ehrler	The challenges of measuring ion migration in perovskite solar cells

Tuesday – Perovskites: Ions, Interfaces, Devices

Time	Speaker	Title
09:00–09:30	Vladimir Dyakonov	Transient phenomena and ion kinetics in lead-halide perovskites
09:30–10:00	Philip Schulz	Interface Formation in Perovskite Solar Cells: Insights from Photoemission Spectroscopies Across Buried Interfaces
10:00–10:30	Uwe Rau	Charge Carrier Collection in Lead-Halide Perovskite Solar Cells
10:30–10:50	Coffee break	
10:50–11:20	Fabian Thome	Understanding Charge Carrier Dynamics in Transient Measurements of Perovskite Absorber - Transport Layer Systems
11:20–11:50	Vida Engmann	Stabilizing NFA based organic solar cells
11:50–12:20	Jenny Clark	
17:00–17:30	Dan Oron	The role of the A-site cation in determining electronic properties of lead halide perovskites
17:30–18:00	Paulina Plochocka	Organic - inorganic metal halide perovskites
18:00–18:30	Ivan Scheblykin	Decoding the Complexity of Perovskite Photoluminescence: The Interplay of Defects, Their Dynamics, and Nanostructure

Wednesday – Theory & Organics I

Time	Speaker	Title
09:00–09:30	David Egger	Next-Level Optoelectronic Property Predictions with Hamiltonian Learning
09:30–10:00	Anna Köhler	Disentangling exciton dissociation pathways in the nonfullerene acceptor Y6
10:00–10:30	Alison Walker	Combined electrical-optical model to interpret experimental data on perovskite solar cells
10:30–10:50	Coffee break	
10:50–11:20	Gary Hodes	The evolution of quantum dot research and the Nobel prize
11:20–11:50	Esther Alarcon-Llado	Metasurfaces enabling new solar cell designs
11:50–12:20	Matteo Tirrito	Nanoprobe investigation of perovskite III-V-nanowires multi-junction solar cells

17:00–17:30	Cleber Marchiori	Electronic Structure and Degradation in Organic Solar Energy Materials: Insights from NEXAFS and Resonant Photoemission
17:30–18:00	Selina Olthof	Reflection Electron Energy Loss Spectroscopy of Semiconductors
18:00–18:30	Somin Park	Nanoscale Surface Chemistry for Perovskite Photovoltaics

21:00 – 22:00	Quantsol	General Assembly
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Thursday – Organics II & Advanced Concepts

Time	Speaker	Title
09:00–09:30	Daniel Vanmaekelbergh	Realizing a dream in nanoscience: simultaneous measurement of the local atomic and electronic structure of a crystalline material
09:30–10:00	Klaus Lips	How useful is Solid-State NMR to gain new insights into the structure-property relationship in hybrid perovskites?
10:00–10:30	Igal Levine	Mapping the Energetic Defect Landscape of Pb-free HaPs Using Surface PhotoVoltage
10:30–10:50	Coffee break	
10:50–11:20	Matthias Maiberg	Thermionic emission in heterojunction solar cells – a new view on another old story
11:20–11:50	Mathis Van de Voorde	Diffuse light concentration in free space with down-conversion CsPbCl ₃ :Yb ³⁺ nanocrystals
11:50–12:20	Sascha Feldmann	Tracking charge, spin and light polarization in space and time in emerging semiconductors
17:00–17:30	Safa Shoaee	When The Triplet Excitons Shape Recombination, Voc and Efficiency Limits
17:30–18:00	Ivana Lj. Validžić	Improved photovoltaic performance of a monolithic carbon-based perovskite solar cell under natural and various artificial lighting, highlighting additional light effects by using an optical WFL system
18:00–18:30	Ardalan Armin	Energetics and Kinetics Requirements for High efficiency Organic Solar Cells

Friday – Mixed, Organics & Outlook

Time	Speaker	Title
09:00–09:30	Frédéric Laquai	How the Energetic Landscape of Non-Fullerene Acceptor Organic Solar Cells Controls Device Performance
09:30–10:00	Marina Freitag	
10:00–10:30	Charusheela Ramanan	Competitive Pathways in Structurally Dynamic Organic Chromophore Systems
10:30–10:50	Coffee break	
10:50–11:20	Albert Polman	On the local optical density of states in planar and structured perovskite films
11:20–11:50	Susanne Siebentritt	Band offsets in heterojunction solar cells – a new view on a (very) old story
11:50–12:20	Antoine Kahn	Investigation of a Singlet Fission - Triplet Transfer Interface Configuration for a Metal Halide Perovskite Solar Cell
17:00–17:30	Thomas Hannappel	Interfacial studies on multi-absorber structures for photoelectrochemical solar fuel production
17:30–18:00	Hai Wang	From Light to Heat: Photothermal Conversion Governs Ultrafast Nonequilibrium Charge Transport in 2D Titanium Carbide MXenes
18:00–18:30	Morten Madsen	Stability of scalable organic photovoltaics