

Working Group "Young DPG" Arbeitskreis junge DPG (AKjDPG)

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With this year's program the Working Group young DPG wants to appeal to many participants. Those, who are new to the conference and are feeling lost in view of the many sessions and the many topics, we want to offer the chance to build a solid foundation and to learn about several topics of the conference on a beginners level. You are cordially invited to visit the tutorials on Sunday!

The PhD-Symposium explores the world of Quantum Optimal Control Theory. The symposium is especially designed to give an introduction into the topic on the level of BScs, MScs and PhDs.

In joint work with the Working Group Information (AGI) we also want to give the possibility to dive in and to discuss a hot topic determining their future, namely about the upcoming developments of the publication system. The first talk in the session will also contain a short tutorial on the subject.

With the Hacky Hour on Thursday, we want to give you the opportunity to share your favourite tools which you use in your daily research with all the other participants.

For participants at the end of their PhD and young PostDocs we offer in collaboration with the Working Group on Industry and Business (AIW) Lunch Talks during the lunch breaks (in German) on Tuesday and Thursday. Within these talks physicists who already gained experience in working in the economy will share their knowledge. With the Industry Day "Physiker in der Energietechnik" (in German), which is jointly organised by AIW, Working Group Energy (AKE) and AKjDPG, possible job positions for physicists in the world of energy technology are presented.

Last but not least, we also offer the opportunity to ease the hard scientific program and to learn about interesting topics in the atmosphere of an EinsteinSlam. Slammers will have the possibility to present physical topics to an audience and to demonstrate that they are the right person to own the Golden Albert. Since we also want to support networking between the conference's participants, we offer a Tower Building Contest on Tuesday right after the plenary talk and a pub crawl on Wednesday evening.

Everyone is welcome! We are looking forward to seeing you at our events!

Overview of Invited Talks and Sessions

(Lecture rooms U HS 326, U HS 224, U HS 323, U SR 124 and Audimax)

Tutorials

AKjDPG 1.1	Sun	16:00–17:00	U HS 326	Freie-Elektronen Laser für Röntgenstrahlen: Physikalische Prinzipien und technische Realisierung — ●JÖRG ROSSBACH
AKjDPG 1.2	Sun	17:00–18:00	U HS 326	Introduction to x-ray quantum optics — ●JÖRG EVERS
AKjDPG 2.1	Sun	16:00–17:00	U HS 224	How Ultrafast Spectroscopy Can Follow Molecular Reaction Dynamics in Real Time — ●PATRICK NUERNBERGER
AKjDPG 2.2	Sun	17:00–18:00	U HS 224	Theoretical Perspective on Time-resolved Spectroscopy of Molecular Systems — ●OLIVER KÜHN
AKjDPG 3.1	Sun	16:00–17:00	U HS 323	Quantum metrology from a quantum information science perspective — ●GEZA TOTH, IAGOBA APELLANIZ
AKjDPG 3.2	Sun	17:00–18:00	U HS 323	Quantum metrology with non-classical states of atoms — ●CARSTEN KLEMP

Invited talks of the PhD-Symposium – Optimal Control Theory in the Leading Domains of Quantum Technology (SYPS)

See SYPS for the full program of the symposium.

SYPS 1.1	Mon	14:00–14:30	U Audimax	Optimal control of many-body quantum systems — ●SIMONE MONTANGERO
SYPS 1.2	Mon	14:30–15:00	U Audimax	Light matter quantum interface based on single colour centres in diamond — ●FEDOR JELEZKO
SYPS 1.3	Mon	15:00–15:30	U Audimax	Principles of Quantum Systems Theory and Control Engineering — ●THOMAS SCHULTE-HERBRÜGGEN
SYPS 1.4	Mon	15:30–16:00	U Audimax	Quantum metrology with Rydberg atoms — ●SEBASTIEN GLEYZES, ARTHUR LARROUY, REMI RICHAUD, SABRINA PATSCH, JEAN-MICHEL RAIMOND, MICHEL BRUNE, CHRISTIANE KOCH

Invited talks of the symposium: Physiker in der Energietechnik – Industrietag (SYIT)

See SYIT for the full program of the symposium.

SYIT 1.1	Thu	10:30–11:10	U A-Esch 1	LOHC - wie Wasserstoff zum flüssigen Treibstoff bei Raumtemperatur wird — ●CORNELIUS VON DER HEYDT
SYIT 1.2	Thu	11:10–11:50	U A-Esch 1	Energiewende können Physiker auch ?! — ●MATTHIAS LANGE
SYIT 1.3	Thu	11:50–12:30	U A-Esch 1	Windenergietechnik als Arbeitsgebiet für Physikerinnen und Physiker — ●UWE RITSCHEL

Lunch Talk

PV V	Tue	12:45–13:30	U A-Esch 1	TRUMPF - Arbeiten als Physiker in einem globalen, innovativen Familienunternehmen — ●MALTE KUMKAR
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Sessions

AKjDPG 1.1–1.2	Sun	16:00–18:00	U HS 326	Tutorial X-Ray Lasers (joint session AKjDPG/A)
AKjDPG 2.1–2.2	Sun	16:00–18:00	U HS 224	Tutorial Molecular Spectroscopy (joint session AKjDPG/MO)
AKjDPG 3.1–3.2	Sun	16:00–18:00	U HS 323	Tutorial Quantum Metrology
AKjDPG 4.1–4.3	Wed	14:00–15:45	U SR 124	New concepts in scientific publishing (joint session AGI/AKjDPG)
AKjDPG 5	Thu	10:30–12:30	U SR 124	Hacky Hour - part 1 (joint session AGI/AKjDPG)
AKjDPG 6	Thu	14:00–16:00	U SR 124	Hacky Hour - part 2 (joint session AGI/AKjDPG)

Tower Building Contest

Tuesday, 12 March 2019 10:00 U Audimax

Physics Students' Theater

Tuesday, 12 March 2019 19:00 U Audimax

EinsteinSlam

Tuesday, 12 March 2019 20:00 U Audimax

Pub Crawl

Wednesday, 13 March 2019 20:00 Meeting point: U Audimax