

Symposium Physics for the Energy Turn (SYPE)

jointly organized by
 the Quantum Optics and Photonics Division (Q),
 the Working Group on Energy (AKE),
 the Working Group ‘Young DPG’ (AGjDPG), and
 the Working Group on School Issues (AGS)

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Sustainable and affordable energy production is one of the key challenges for the global society in the 21st century, and has been set on the front-page of Germany’s political agenda by the so-called “Energy Turn”. Arguably more than any other current political headline, the latter attracts and stimulates the curiosity and creativity of scientists from fundamental to applied research, inasmuch as it defines a truly interdisciplinary research field, with tons of fascinating, widely open questions, many of them challenging the physics community. Not only does this subject give us physicists a wonderful, hard problem to solve, but it also makes the relevance of modern physics research, from thermodynamics and turbulence to fundamental quantum science, very tangible for the broader public. In particular does the Physics for the Energy Turn provide a fascinating nucleation point for the next generation’s perception of our scientific discipline as an indispensable cultural competence to the solution of high-impact challenges for modern societies. The present Symposium will convey the chances and challenges for scientific innovation as unveiled by the Energy Turn, with high school students, teachers and young researchers as target audience. Short interventions of prominent and active players in the field, followed by questions and discussion, will provide an arena for enlightening debate.

Overview of Invited Talks and Sessions

(Lecture room: Kinosaal)

Invited Talks

SYPE 1.1	Mon	14:00–14:15	Kinosaal	Meeting the Energy Challenge — ●STEVE CHU
SYPE 1.2	Mon	14:15–14:30	Kinosaal	Energy transformation pathways towards 2°C stabilization — ●GUNNAR LUDERER
SYPE 1.3	Mon	14:30–14:45	Kinosaal	How can Physicists contribute to the Energy Transformation? — ●EICKE R. WEBER
SYPE 1.4	Mon	14:45–15:00	Kinosaal	Photosynthesis: lessons from nature — ●RIENK VAN GRONDELLE
SYPE 1.5	Mon	15:00–15:20	Kinosaal	Questions and perspectives for highschool physics and young researchers — ●GERWALD HECKMANN

Sessions

SYPE 1.1–1.5	Mon	14:00–16:00	Kinosaal	Physics for the Energy Turn
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