

Welcome

We are happy to welcome all participants to the PESS & PELSS 2022. After two years of online student summits, we are able to host all students in the facilities of the Fraunhofer IEE in Kassel.

For the first time, the Power and Energy Student Summit and the Power Electronics Student Summit PESS & PELSS 2022 take place as a joint professional international conference specifically aimed at master and PhD students. The main focus is on the fields of electrical power engineering and power electronics. The conference allows students to gain first experiences in writing, publishing and discussing their own publications in front of a professional audience.

This year's conference consists of an engaging program with one keynote lecture, 30 paper presentations, networking activities and social interaction. Best paper and presentation awards are evaluated.

The PESS & PELSS 2022 is jointly organized by the department of Energy Management and Power System Operation of the University of Kassel, the Fraunhofer Institute of Energy Economics and Energy System Technology (Fraunhofer IEE), the Professorship for eMobility and electrical Infrastructure of the Hochschule Bonn-Rhein-Sieg University of Applied Sciences and the VDE Young Energy Net. It is supported and sponsored by the IEEE PES Germany Chapter, the IEEE IES/IAS/PELS German Chapter, CIGRE SC6 Germany, CIGRE Next Generation Network VDE ETG, IEEE Power Electronics Society, IEEE Industry Applications Society, IEEE Power & Energy Society, and sponsored by OPAL-RT Germany GmbH, EAM Netz GmbH, Infineon Technologies AG, SMA Solar Technology AG, Egston Power Electronics GmbH and TransnetBW GmbH.

We wish to thank all members of the scientific board for their support during paper reviewing and all session chairs for the moderation of our sessions.

Prof. Martin Braun
Prof. Marco Jung

Conference Topics

- Grid Planning
- Grid Operation and Control
- Energy Management / Energy Efficiency
- High Voltage Engineering
- Cross-Cutting Topics
- Power Electronics for Grids, Smart Grids and Island Grids
- Control Strategies for a Sustainable, Resilient and Reliable Grid
- Renewable Energy Systems: Wind, Photovoltaic and Other Solutions
- Power Electronics for Storage Systems and Hydrogen Applications
- Power Electronics for E-Mobility
- Components, Converter Modelling and Topologies, Design and Low-Level Control

Conference Chairs

Prof. Dr.-Ing. Martin Braun, University of Kassel,
Department of Energy Management and Power System Operation

Prof. Dr.-Ing. Marco Jung, Professorship for eMobility and Electrical Infrastructure,
Hochschule Bonn-Rhein-Sieg, University of Applied Sciences

Organizing Team

Britta Armbrüster
Gourab Banerjee
Dr. Ron Brandl
Dr. Ulrike Fuchs
Angelica Gamarra
Christin Hesse-Schuchardt
Niklas Hoffmann
Jan Lipphardt
Björn Machill
Andreas Nast
Moritz Neuschäfer
Pooja Prashantha
Sylvia Riebeling
Danny Schneider
Andrea Schön
Martina Zanker