

Programme

Power Electronics Electrical Machines Energy Control Power Systems



EUROPEAN PHD SCHOOL

23 - 27 May 2022, Gaeta/Italy

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PROGRAMME

MONDAY May 23, 2022

08:30 – 09:00 **Registration desk** open

09:00 – 09:30 **Opening Session** @ Conference Room

09:30 – 10:15 **Keynote Session 1** @ Conference Room

Prof. Thomas Ebel (SDU University of Southern Denmark) - **Advanced Capacitor Technologies**

10:15 – 10:45 *Coffee Break*

10:45 – 11:30 **Keynote Session 2** @ Conference Room

Davide Barlini (Mitsubishi Electric, FR) - **The Role of Power Electronics Engineers in Industry in our Ever-Changing World**

11:30 – 13:00 **Presentations by participant companies**

13:00 – 14:30 *Welcome Lunch*

14:30 – 16:00 **Poster Session A** (last year PhD's)

16:00 – 16:15 *Coffee Break*

16:15 – 18:30 **PhD-Company Meetings (Recruitment)**

19:30 *Transfer to dinner*

20:00 – 22:30 **Social Dinner and Award Celebration**

TUESDAY May 24, 2022

09:00 – 10:00 **Keynote Session 3** @ Conference Room

Dr. Torsten Leifert (Volkswagen, DE)
- **Trends in e-Mobility**

10:00 – 12:30 **Lecture 1** @ Conference Room

Prof. Miroslav Vasic (UPM Madrid, ES)
- **Design of Inductive Power Transfer**

12:30 – 13:30 *Lunch Break*

13:30 – 15:30 **LIVE DEMO SESSION** by companies

15:30 – 17:30 **Lecture 2** @ Conference Room

Prof. Giovanni Mazzanti (Univ. of Bologna, IT)
HVDC Power Transmission Cables

WEDNESDAY May 25, 2022

09:00 – 10:00 **Keynote Session 4** @ Conference Room

Salvatore Cascino (STMicroelectronics, IT)
- **Wide Bandgap Power Devices**

10:00 – 12:30 **Lecture 3** @ Conference Room

Prof. Regine Mallwitz (University of Braunschweig, DE) - **Application Aspects of WBG Devices**

12:30 – 13:30 *Lunch Break*

13:30 – 14:30 **Poster Session B** (1st and 2nd year PhD's)

14:30 – 18:00 **Lecture 4** @ Conference Room

Dr. Giovanni De Carne (KIT Karlsruhe Institute of Technology, DE) - **Power HIL**

20:00 – 22:30 **Pizza Dinner**

THURSDAY May 26, 2022

09:00 – 10:00 **Keynote Session 5** @ Conference Room

Alfredo Primon (C.R.F., IT) - **Fail-Operational Automotive Powertrain**

10:00 – 12:30 **Lecture 5** @ Conference Room

Dr. Massimiliano Visintin (Schindler Group, CH)
Elevator Industry: Drive Systems and Technical Challenges'

12:30 – 13:30 *Lunch Break*

13:30 – 15:30 **Lecture 6** @ Conference Room

Ass. Prof. Jacques Laeuffer (FR) - **HF Electromagnetic Propagation Analysis for EMC Operation of Electric Drives**

15:30 – 16:00 *Coffee Break*

16:00 – 18:30 **Lecture 7** @ Conference Room

Prof. Petros Karamanakos (Tampere University, FIN)
Model Predictive Control of Power Electronic Systems

FRIDAY May 27, 2022

08:30 – 10:15 **Keynote Session 6** @ Conference Room

Dr. Greg Ombach (Airbus Group, DE) - **Technological Evolution toward more Sustainable Transport - from Green Roads to Green Air Mobility**

10:15 – 10:30 *Coffee Break*

10:30 – 12:15 **Lecture 8** @ Conference Room

Antonello Antoniazzi, Dr. Marco Carminati (ABB, IT) - **Protection Technology: Solid State and Hybrid Circuit Breakers**

12:15 – 13:30 *Lunch Break*

13:30 – 14:30 **Final Test for ECTS** @ Conference Room

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The European PhD School on 'Power Electronics, Electrical Machines, Energy Control and Power Systems' is organized by the University of Cassino in cooperation with ECPE European Center for Power Electronics since 12 years. It's a unique event in Europe for young power electronics engineers from academia to exchange experience and technical information about their PhD projects.

The PhD School starts with an Industry Day covering keynote presentations from industry experts as well as a dialogue session for detailed face-to-face discussions between PhD students and industry representatives. The 1st day ends with a social dinner including the PhD School Award celebration. The rest of the week is dedicated to high-level lectures from several experts from academia but also from industry, related to the following thematic areas:

- Topics
- Power Electronics
 - Electrical Machines
 - Energy Control
 - Power Systems

More information and registration: ecpe.org/phdschool

More information about the Industry Day for Recruitment see last page!





Awards 2022

European PhD School Award 2022

On a voluntary basis, each last-year stage PhD student can present the research activity to a qualified PhD School Commission at the Poster session A. At the end of the Session, the "European PhD School Award 2022" will be assigned by the Commission, with a grant of € 1.000,00.

Young PhD School Award 2022

Each PhD student attending the 2022 edition of the PhD School, except the ones participating to the Poster session A (see above), is requested to prepare a poster, in pdf format, of her/his research activity. For first year PhD students the poster can be prepared with the planned project and activities. The "Young PhD School Award 2022" will be assigned by the Commission, with a grant of € 500,00.

Research activity:

All PhD students have to send the Research Activity document and a copy of their CV.



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EUROPEAN PHD SCHOOL

Contact Organization



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Registration: www.ecpe.org/phdschool

Registration is also open to academic and industry delegates!

Industry Day for Recruitment --- Monday, 23 May 2022 ---



Industry Day for Recruitment – the meeting point for companies and PhD students!
In the frame of the PhD School event, ECPE organizes the Industry Day for Recruitment, where HR people from industry can meet PhD students on-site. Established companies in the field of power electronics, electrical drives and systems participate every year. Moreover, a special session with presentations is dedicated to the participating companies. .