

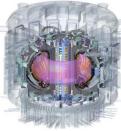
International Society on Pulsed Power Applications e.V.

www.pulsed-power.org

Pulsed Power Technology and Applications

March 10 – March 11, 2022 ITER Organizations Head-quarter, Route de Vinon-sur-Verdon, CS 90 046, 13067 St. Paul-lez-Durance, France







Hosted by the ITER Organization (IO), this year's annual workshop of the ISP is about pulsed power applications. The topic is intentionally kept very open and is open for all possible applications around the topic of pulsed power.

This workshop is intended to regularly provide the possibility of networking within the pulsed power community and to support the scientific / technical exchange between science, industry and students. The frame of the workshop shall provide a more intimate opportunity for social and technical interaction than a large conference. The workshop is accompanied by a tour to the ITER construction site and the annual member meeting of the ISP.

The topics Fusion and Pulsed Power are close to each other and have many overlaps. Therefore, it is a great pleasure and honor for the ISP that the ITER organization that has set itself the goal of bringing the sun to earth, has offered to host this workshop and the member meeting. ITER is a groundbreaking project of superlatives. We have the opportunity to take a close look at the huge construction site and learn more about this project of the century.

The workshop is free of charge. Accommodation, meals and travel are the responsibility of the participants.

Agenda

Thursday March 10

12H00 Registration Arrival

13H30 - 15H35 Workshop Part 1a (25min per presentation incl. Questions)

Ejlal Shahriari (UPPA) High power thyristors operating in impact ionization wave

mode: a preliminary study toward ultra-high current

application

Ivan Lavrinovich

(UPPA)

2 kV thyristor triggered in impact-ionization wave mode by a

solid-state spiral generator

Mawuena Rémi Degnon

(UPPA)

Standard semiconductor diodes as high-voltage opening

switches

Anton Gusev (UPPA) Subnanosecond switching of standard thyristors triggered in

impact-ionization wave mode by a high-voltage PCSS driver

Laurent Pecastaing

(UPPA)

HiVoSS Project - New use of semiconductors for reflection

reduction in IVA architecture

15H35 – 16H00 Coffee Break

16H00 - 17H40 Workshop Part 1b (25min per presentation incl. Questions)

Martin Sack (KIT) Specific Design Concepts for Pulse Generators in PEF

Treatment Devices

Sylvain Pinguet (Pulsolution)

New approach for an electromagnetically driven active armour system

Mustafa Karagoz

(Aselsan)

ASELSAN EML Activities

Vasiliy Krutikov

(UB RAS)

Materials and constructions of high field (50 T) pulsed magnet

Transfer to Aix-en-Provence

19H30 Dinner (Sponsored for ISP Members)

Friday March 11

8H30 – 9H30 ISP member meeting

9H30 – 10H00 Coffee Break

10H00 – 12H30 Workshop Part 2 (25min per presentation incl. Questions)

Tom Huiskamp (TUE) Teaching Pulsed Power

Markus Teschke (IPP) BUSSARD, a success story of an in-house development: A 16

phases IGBT-based high frequency, high current inverter;

Antonio Magnanimo

(IPP)

A revised supercapacitors-based MMC for future ASDEX

Upgrade power supply system's integration.

Alexandre Capaul

(Ampegon)

Gyrotron Power Supplies for Fusion Applications

ITER Introduction to ITER (45min)

14H00 - 16H00 ITER TOUR

16H00 End of the Event

Further information: www.pulsed-power.org/events

Registration:

The registration should be done via the service provider lets-meet under the following link. The personal data are not visible for the other participants.



https://lets-meet.org/reg/71af9d456be29c9636

Covid:

What surprises the Covid pandemic has in stock for us is, unfortunately, hardly predictable. We assume that we will be able to hold the workshop without major restrictions in compliance with the applicable regulations and plan accordingly.

Contacts:

Michael Bader

Workshop organization Phone: +41 79 418 96 40

Ampegon Email: event@pulsed-power.org

Oliver Liebfried

ISP treasurer Phone: +33 389 69 51 96

French-German research Institute of Saint -Louis Email: treasurer@pulsed-power.org

Georg MüllerPhone: +49 721 608-24669ISP vice chairmanEmail: vice-chairman@pulsed-

Karlsruhe Institute of Technology power.org

Sylvain Pinguet

ISP secretary Phone: +41 79 136 94 36

Pulsolution GmbH Email: secretary@pulsed-power.org

Travel information

The ITER site is situated in the middle of the Provence about 30 km northwest of Aix-en-Provence. The travel options are well described on the ITER website:

www.iter.org/visiting/howto

Hotel:

Accommodation is basically the responsibility of the participants. ISP has reserved a contingent of rooms at «Hôtel Artea Aix Centre». This reservation will remain until 10.02.2022, after which the rooms will be released.

Please refer to «WORSHOP ISP-CEA» when booking. The rate is then **88€** per night. In addition, a tourist tax of **1.65€** will be charged. A credit card is required for the reservation



www.hotel-artea-aix-en-provence.com https://goo.gl/maps/vBHH8g8Y7MeA9gFf7

4 Boulevard de la République 13100 Aix-en-Provence Tél.: +33 4 42 27 36 00

E-Mail: reception@hotelartea.com

Parking is in 2minutes walking distance:

Parking Rotonde 2 Rue Lapierre. https://goo.gl/maps/ujYaUzYUyGuSVP21A

The ISP dinner will be held within walking distance in the city center.