



# Dear Colleagues,

On behalf of the Local Organizing Committee of **EAPPC-BEAMS-EML 2024**, I am proud and very happy to invite all pulsed power experts to **Amsterdam**, The Netherlands, from **September 22-26**, **2024**, for the "10<sup>th</sup> Euro-Asian Pulsed Power Conference – EAPPC" co-organized with the "25<sup>th</sup> International Conference on High-Power Particle Beams (BEAMS)" and the "21<sup>st</sup> International Symposium on Electromagnetic Launch Technology (EML)".

The conference will provide a forum for the exchange of scientific and technical information between industry, academic institutions and research organizations on the broad range of current and emerging research areas about technologies and applications of pulsed power, high power particle beams and magnetic fields.

There are a growing number of industrial, environmental and biomedical applications using these technologies. During the conference important applications and their corresponding commercial opportunities will be discussed such as: the reduction of pollutants from fossil fuels; application of pulsed plasma and electric field techniques for air- or water treatment, food sterilization including extraction, bioelectrics and cancer treatment; novel pulsed techniques for separating water from oil; magneto-forming techniques and many others.

With great dedication and enthusiasm the Local Organizing Committee is preparing to host this leading event. We are looking forward to collaborate with you and provide you sponsorship opportunities that will ensure extensive exposure that only an international event, entirely dedicated to this particular domain, can offer. We are expecting close to <u>500 people</u> to visit our conference.

We would like to thank you in advance for your support and contribution to the Conference and are looking forward to welcome you and your company in Amsterdam.

Prof. dr. Guus Pemen

Chair of EAPPC-BEAMS-EML 2024

Eindhoven University of Technology



# **EAPPC - BEAMS - EML History**

The "Euro-Asian Pulsed Power Conference (EAPPC)" is the result of several scientific predecessor events. The EAPPC is held in Asia and Europe in turn biannually to give researchers on pulsed power technology worldwide a broader base for communication.

In Europe Pulsed Power Conferences started in the United Kingdom with the IEE Colloquium on Pulsed Power Applications 1989, with from the early 90's succeeding bi-annual IEE Colloquiums and Symposia and the one-day UK Pulsed Power Symposium. After the International Conference on Pulsed Power Applications 2001 at Gelsenkirchen, Germany, it was natural to have the idea to organize a European Pulsed Power Symposium. As a consequence the 1st European Pulsed Power Symposium was held in October 2002 at the French-German Research Institute, Saint Louis, France.

At about the same time, in Asia three countries (China, Korea and Japan) begun to organize the International Symposium on Pulsed Power and Plasma Applications (ISPP, started in 2000).

At the European Pulsed Power Symposium in 2004, prof. Ivor Smith from UK (Europe) firstly discussed with Academician Deng Jianjun from China (Asia) the possibility of organizing a major Euro-Asian pulsed power event, by combining the two above mentioned conferences. Following this, the first Euro-Asian Pulsed Power Conference took place in 2006 in Chengdu, China (Asia) with the second one in 2008 in Vilnius, Lithuania (Europe) and from there on the Euro-Asian Pulsed Power Conference was organized biannually (like the Olympic Games!) with the conference site being alternatively either somewhere in Asia or in Europe. Many of the Euro-Asian Pulsed Power Conferences were organized together with other similar important events such as BEAMS or MEGAGAUSS.

In 2024 for the first time EML joins our conference. The Electromagnetic Launch Technology Symposium (EML) is a biennial event that serves as the principal forum for the discussion, interchange, and presentation of research on critical technologies for accelerating macroscopic objects or projectiles to hypervelocities using electromagnetic or electrothermochemical launchers. The EML symposia have a long-standing international reputation as a catalyst for stimulating research in the field of electromagnetic launch.

The present conference is organized in Amsterdam, The Netherlands (Europe) and represents the 10<sup>th</sup> Euro-Asian Pulsed Power Conference, being organized together with the BEAMS and the EML Conference. An overview of all conferences is listed below.

- EAPPC 2006, Chengdu, China
- EAPPC 2008, Vilnius, Lithuania
- EAPPC BEAMS 2010, Jeju, Korea
- EAPPC BEAMS 2012, Karlsruhe, Germany
- EAPPC BEAMS MEGAGAUSS 2014, Nagaoka, Japan
- EAPPC BEAMS MEGAGAUSS 2016, Estoril, Portugal
- EAPPC BEAMS 2018, Changsha, China
- EAPPC BEAMS MEGAGAUSS 2020, Biarritz, France
- EAPPC BEAMS 2022, Seoul, Korea
- EAPPC BEAMS EML 2024, Amsterdam, The Netherlands



## Overview

EAPPC - BEAMS is a bi-annual international conference in the field of Pulsed Power, High Power Microwaves and Particle Beams and in 2024 is combined for the first time with the EML symposium.

This international event represents a major forum where experts from all over the world gather to share their knowledge and experience and to encourage scientific exchange and amongst industry colleagues and professionals. This conference is an important forum for scientists and engineers in the pulsed power physics and technology domain, to share knowledge on topics as as generators and components, pulsed power applications, high power microwaves and RF sources, high-energy density physics and technology, particle beam technology, ultrahigh magnetic field generation and applications, explosively-driven pulsed power and many others.

The conference will provide an up-to-date review of the most recent achievements, together with an opportunity for exchanging scientific and technical information between industry, academic institutions and major research organizations across a broad range of current and emerging research areas.

Title The 10<sup>th</sup> Euro-Asian Pulsed Power Conference (EAPPC)

jointly organized with the 25<sup>th</sup> International Conference on High-Power Particle Beams (BEAMS) and the 21<sup>st</sup> International Symposium on Electromagnetic

Launch Technology (EML)

Dates Sunday 22 – Thursday 26 September 2024

Venue Beurs van Berlage, Amsterdam, The Netherlands https://beursvanberlage.com/

Organized by Eindhoven University of Technology, Electrical Energy Systems group

Programs Welcome Reception, Opening Ceremony, Plenary & Oral & Poster Sessions,

Night Tour, Banquet, Closing Ceremony, Exhibition

Key dates Abstract submission opened Feb 1, 2024

Notification of abstract acceptance May 15, 2024 Early registrations May 15, 2024

Outstanding Young Scientist Award application May 1 – July 31, 2024 Special Issue paper submission December 31, 2024

Contact Guus Pemen | Conference chair a.j.m.pemen@tue.nl



## **EAPPC-BEAMS-EML 2024 Committees**

## Local Organizing Committee (still being expanded)

Guus Pemen | Chair

Eindhoven University of Technology

Annemarie van de Moosdijk | Secretary

Eindhoven University of Technology

Lotte Krah

Eindhoven University of Technology, Conference Office

Tom Huiskamp | Technical Chair

Eindhoven University of Technology

Chiel Ton

Eindhoven University of Technology

**Inge Sanders** 

Eindhoven University of Technology, Conference Office

## International conference organization

Guus Pemen | Chair EAPPC-BEAMS

Eindhoven University of Technology, The Netherlands

Jun Li | Chair EML

China Electrotechnical Society

Tom Huiskamp | Technical Chair EAPPC

Eindhoven University of Technology, The Netherlands

Bucur Novac | Technical Chair BEAMS

Loughborough University, UK

Xinjie Yu | Technical Chair EML

Tsinghua University, China

# **EAPPC International Organizing Committee**

**CHAIKOVSKY Stanislav,** Institute of Electrophysics of the Ural Division of the Russian Academy of Sciences, Ekaterinburg, Russia

DENG Jianjun, Institute of Fluid Physics (CAEP), China

JIANG Weihua, Nagaoka University of Technology, Japan

JIN Yun-Sik, Korea Electrotechnology Research Institute, Korea

**KATSUKI Sunao,** Institute of Pulsed Power Science, Kumamoto University, Japan

MÜLLER Georg, Karlsruhe Institute of Technology, Germany

NOVAC Bucur M., Loughborough University, United Kingdom

PEMEN Guus, Eindhoven University of Technology, Netherlands

PECASTAING Laurent, University of Pau, France

REDONDO Luís, Lisbon Engineering Superior Institute, Portugal

RYOO Hong-Je, Chung-Ang University, Korea

SCHNEIDER Markus, French-German Research Institute of Saint-Louis. France

WANG Xinxin, Tsinghua University, China

**ZHANG Jiande,** National University of Defense Technology of China, China

**ZURAUSKIENE Nerija,** Center for Physical Sciences and Technology Vilnius, Lithuania

# **BEAMS Technical Program Committee**

## Seong-Tae Han

Korea Electrotechnology Research Institute, Korea

## Jongkuk Kim

Korea Institute of Materials Science, Korea

## Man-Woo Lee

Dongnam Institute of Radiological & Medical Sciences, Korea

## Hoe-Chun Jung

Institute for Basic Science, Korea

# Jae Sang Lee

Korea Institute of Fusion Energy, Korea

## Weihua Jiang

Nagaoka University of Technology, Japan

## Seung-Hwan Shin

Pohang Accelerator Laboratory, Korea

## Eun-Mi Choi

Ulsan National Institute of Science and Technology, Korea

## Kyu-Ha Jang

Korea Atomic Energy Research Institute, Korea

## Jin-Hyun Jeong

Korea Institute of Fusion Energy, Korea

# Jianjun Deng

Institute of Fluid Physics, CAEP, China

## Yoav Hadas

Rafael National Laboratory, Israel



Luís Redondo

Lisbon Engineering Superior Institute, Portugal

Georg Müller

Karlsruhe Institute of Technology, Germany

Bucur M. Novac

Loughborough University, United Kingdom

Edl Shamiloglu

University of New Mexico, USA

Nikita Ryskin

Kotelnikov Institute of Radio Engineering and Electronics of

Russian Academy of Science, Russia

Yasuhiro Matsuda

Tokyo University, Japan

**Bryan Oliver** 

Sandia National Laboratories, USA

Jiande Zhang

National University of Defense Technology, China

Hasina Khatun

Central Electronics Engineering Research Institute, India

<b>EML International C</b>	)rganizing	Committee
LIVIL IIIICI Hational C	/igailizilig	Committee

SCHNEIDER Markus, French-German Research Institute of Saint-Louis, France

LI Jun, China Electrotechnical Society, China

YU Xinjie, Tsinghua University, China

# **EAPPC-BEAMS-EML 2024 Conference topics**

# Pulsed power physics and technology, generators and components

- High-Voltage Power Supplies
- Pulsed Power Generators and Networks
- High-power electronics
- Closing and Opening Switches
- Pulsed Power Diagnostics
- High-Voltage Insulation and Dielectric Breakdown Phenomena
- High-Energy Density Storage
- Linear Transformer Drivers (LTDs), Pulse Forming Lines and Transformers
- Explosively-Driven Pulsed Power
- Numerical Modelling and Computational Techniques

# **Pulsed power applications**

- Medical, Biological and Environmental Applications
- Industrial and Commercial Applications
- Space and Emerging Applications
- Modulators and pulsed magnets for accelerators
- Wire Explosions

# **High-power microwaves and RF sources**

- High Power Microwave Systems and Sources
- Compact and repetitive pulsed power systems



- Non-linear Transmission Lines (NLTL)
- Fast and slow wave devices
- High Power Antennas
- HPEM Effects
- Numerical modelling of HPM systems
- Terahertz Technology

## Particle beam technology

- High-current Accelerators
- Free Electron Lasers
- Charged Particle Generation and Application
- Intense Electron and Ion Beams
- Plasma, Ion and Electron Sources

# High-energy density physics and technology

- Z, X-Pinches and Imploding Liners
- High-power diodes
- High-power lasers
- Large high-current and high-energy systems
- Fusion related physics and technology
- Equation of state (EOS) and isentropic compression experiments (ICE)

# **Electromagnetic Launch Technology**

- Projectiles
- Launchers
- Modeling and Simulation
- Applications
- Diagnostic Techniques
- Directed Energy

# Sponsorship packages

Sponsoring EAPPC-BEAMS-EML 2024 provides a unique chance to expose your company to be at the forefront of this field. Our sponsorship and exhibition packages offer you four options to raise the visibility of your business and to deliver your key message to attendees. The sponsorship packages are given at the next page.



# Sponsorship packages for EAPPC-BEAMS-EML 2024

	Sponsoring level	Platinum	Gold	Silver	Bronze
	Sponsoring fee	25.000 €	12.500 €	7.000 €	5.000 €
	Exhibition booth area (indicative values, area of the booth still needs to be determined. Booth includes: name banner, side and back panels, wall-to-wall carpeting, 1 table, 2 chairs, electricity, light)	18 m2	12 m2	8 m2	6 m2
	Full registration (gala dinner excluded) - staff number	6	4	2	1
General	Gala dinner invitation - staff number	2	1		
ē	Gala dinner per additional person	85€	85€	85 €	85€
	Extra registration fee for additional person of sponsor company (gala dinner excluded)	750€	750 €	750€	750€
	Select a song to be played at the "large Tesla coil" (will be played during the Welcome Reception and Gala Dinner)	yes	yes	yes	yes
<b>–</b>	Acknowledgement as sponsor during the opening ceremony, gala dinner and closing ceremony	yes	yes		
e at th	Logo exposure on flags and roll-up banners	yes	yes	yes	yes
Logo exposure at the venue	Projection of sponsor's logo on the screen before the beginning of technical sessions and coffeebreaks (logo size will depend on sponsoring level)	yes	yes	yes	yes
Log	Exclusive company banner near registration desk	yes			
logo bsite s)	On the homepage of the website of the conference	yes	yes		
lity (name, logo ompany website of sponsors)	On the homepage of the conference app	yes	yes		
illity (r compa t of sp	On the exhibitors page of the website of the conference	yes	yes	yes	yes
Media visibility (name, logo and link to company website in the list of sponsors)	On the exhibitors page of the conference app	yes	yes	yes	yes
Medi and li	Logo on emails and newsletters	yes			
the	Logo on the first cover of the program (with mentioning as "Platinum Sponsor")	yes			
ure in nce kit	Advertising page in the final program book, together with a company presentation	full page	full page	half page	half page
Logo exposure in the conference kit	Company leaflet in the Conference Kit	yes	yes	options	options
Logo	Company goodies in the Conference Kit	yes	yes	options	options



# Additional sponsorship opportunities – co-financing the conference

The list of opportunities presented below is not definitive and tailor made proposals could be done according to the Sponsor's interests to maximize visibility and to optimally promote your products and services. If there is any further request, please do not hesitate to contact us for further details.

# Additional sponsorship opportunities for EAPPC-BEAMS-EML 2024

OPTIONS	COSTS ( Euro, excl. VAT)
Sponsor of the <b>Local Night Out</b> with the Company Logo on the program under the mention "with the support of"	€ 18.000
Sponsor of the <b>Gala Dinner</b> with the Company Logo on the program under the mention "with the support of"	€ 18.000
Sponsor of the <b>Conference Proceedings USB</b> with the Company Logo on the program under the mention "with the support of"	€ 18.000
Sponsor of the <b>Welcome Reception</b> with the Company Logo on the program under the mention "with the support of"	€ 12.000
Sponsor of <b>one lunch</b> with the opportunity to display flyers	€ 8.000
Sponsor of <b>one coffee break</b> with the opportunity to display flyers	€ 2.000
Advertisement in the program booklet - full page exclusive (already included in Platinum and Gold sponsorships)	€ 2.000
<b>Advertisement</b> in the program booklet - half page exclusive (already included in Silver and Bronze sponsorships)	€ 1.000
Sponsor of the lanyards of the conference (with logo of the sponsor, exclusive)	€ 5.000
Sponsor of <b>staff uniform</b> (T-shirt), with the sponsor logo printed together with the conference logo)	€ 2.000
Company leaflet inserted in the Conference Kit (already included in Platinum, Gold, Silver and Bronze sponsorships)	€ 1.000
Company name and logo in the list of sponsors on the website and app (already included in Platinum, Gold, Silver and Bronze sponsorships)	€ 1.000
Bag, notepad, pen or goodies	€ 3.000



# The "Beurs van Berlage" conference venue

**EAPPC-BEAMS-EML 2024** will be held at the 'de Beurs van Berlage Conference Centre', located in the heart of **Amsterdam**. Amsterdam is the Netherlands' capital, known for its artistic heritage, elaborate canal system and narrow houses with gabled facades, legacies of the city's 17<sup>th</sup>-century Golden Age. Amsterdam has everything international conferences are looking for: great infrastructure, history, culture and multilingual population. It combines the friendliness and accessibility of a historic village with the world-class facilities and cultural attractions of a modern metropolis.



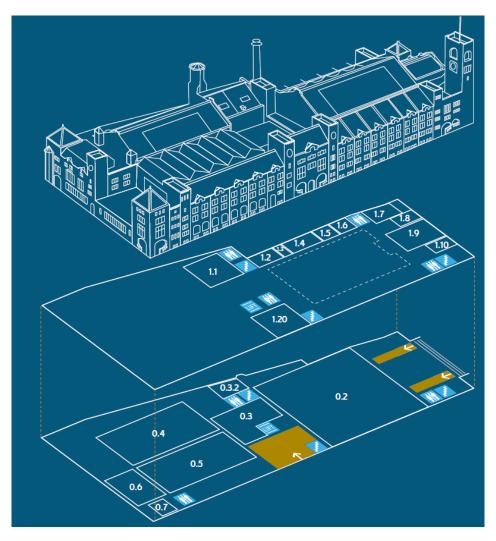
"The Beurs van Berlage venue – located in the heart of Amsterdam"

The conference center, the **Beurs van Berlage**, is located in the heart of the city. This former commodity exchange is one of the defining monuments of the Dutch Capital. The Beurs van Berlage breathes history. Today it's a one in a million conference location in the warm heart of Amsterdam, with high quality and service, an impressive atmosphere and excellent facilities.



An overview of the Beurs van Berlage is given below. Photographs with impressions of the venue and the rooms are given at the next pages. EAPPC-BEAMS-EML 2024 will take place in the following rooms:

- Exhibition, lunch- and coffee breaks, poster sessions: room 0.5 "Graanbeurszaal". Along with the exhibition, the poster sessions, coffee and lunch breaks will also take place in this room. In this way we guarantee a strong presence and interaction of the participants with the exhibition. The photos give an impression of the "Graanbeurszaal". The hall can facilitate max 800 persons, with dimensions in m: 37.5 m x 18.5 m and surface: 700 m<sup>2</sup>.
- Plenary and technical Sessions will take place at room 0.4 "Effectenbeurszaal". Where in the past stock market traders were the boss, knowledge can now be shared on a large scale in the Effectenbeurszaal: max 600 persons, hall dimensions in m: 37.5 m x 18.5 m, surface: 700 m<sup>2</sup>.



Floor map of the **Beurs van Berlage**. EAPPC-BEAMS-EML 2024 will take place in room 0.5 (**Graanbeurszaal**, exhibition, lunch breaks), room 0.4 (**Effectenbeurszaal**, plenary and technical sessions), room 0.3 (reception, welcome/registration desk), room 1.1 (**Veilingzaal**, technical sessions), and room 1.20 (**Administratiezaal**, technical sessions).

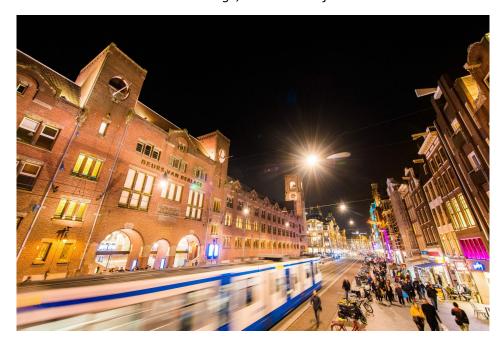


- Technical Sessions will also take place at room 1.1 "Veilingzaal", and room 1.20 "Administratiezaal". Veilingzaal specifications, max 150 persons, hall dimensions in m: 11 m x 15 m, surface: 165 m². Administratiezaal specifications, max 150 persons, hall dimensions 15 x 15 m, surface 190 m².
- All rooms are conveniently and comfortably connected via a spacious reception and stairwell, where the welcome-, information-, and registration desk is located (room 0.3).

# Photographs of the Beurs van Berlage venue



The Beurs van Berlage, in the heart of Amsterdam



Page 12 of 19





The Graanbeurszaal – location of the exhibition



The Graanbeurszaal – location of the exhibition





The Graanbeurszaal – location of the exhibition



The Effectenbeurszaal – location of the Plenary and Technical sessions





The Effectenbeurszaal – location of the Plenary and Technical sessions



The Administratiezaal – location of Technical Sessions (the Veilingzaal is nearly similar)



# Welcome in Amsterdam!

Enjoy the pictures and impressions of this beautiful city and perfect conference location. Watch the Amsterdam city movie: <a href="https://youtu.be/ycLFcMUd64U">https://youtu.be/ycLFcMUd64U</a>



Rent a bike in beautiful Amsterdam!



Enjoy the world-famous canals of Amsterdam!





Amsterdam, city of art, science and innovation!



Amsterdam, one of the world's best touristic destinations!

# **Contact us**

Guus Pemen | Conference chair

Phone: +31 40 247 4492

Email: a.j.m.pemen@tue.nl

Web: www.eappc-beams2024.org



# **Sponsorship Application Form**

# A. Contact Company name

npany name		
Address		
Zip Code	Country	
Vat number		
Tel.		
Vat number	Country	

## **Administrative Contact**

E-mail

# **Invoice address (if different)**

Name	Address	
First name	Zip Code	
Tel.	City	
E-mail	Country	

# B. Sponsorship program

# C. Additional options

Platinum	€ 25.000	
Gold	€ 12.500	
Silver	€ 7.000	
Bronze	€ 5.000	

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D	Additional	registrations
υ.	Additional	registrations

Conference fee	€ 600	
Extra gala dinner	€ 85	
ticket		

Night out	€ 18.000	
Gala dinner	€ 18.000	
Conference proceedings USB	€ 18.000	
Welcome reception	€ 12.000	
Lunch	x € 8.000	_
Coffee break	x € 2.000	_
Advertisement – full page	€ 2.000	
Advertisement – half page	€ 1.000	
Lanyards	€ 5.000	
Logo on staff uniform	€ 2.000	
Leaflet in conference kit	€ 1.000	
Name and logo on website	€ 1.000	
Goodies	€ 3.000	

The list of opportunities presented here is not definitive and tailor made proposals are welcomed, for further requests please contact us.

By signing this form, I apply for the sponsorship of EAPPC-BEAMS-EML 2024 and agree to the sponsorship terms and conditions

Date:



# General terms and conditions

## **Preamble**

The general terms and conditions of EAPPC-BEAMS-EML 2024 Sponsorship are hereafter enumerated.

#### **Booking and participation**

To sponsor EAPPC-BEAMS-EML 2024 conference, please complete the Sponsorship agreement and send it to: Eindhoven University of Technology, Electrical Energy Systems Group, Flux 2.134, P.O. Box 513, 5600 MB Eindhoven, The Netherlands - Email: a.j.m.pemen@tue.nl

All requests will be submitted to the Organizing Committee which reserves the right to refuse applications from companies for which activities would not suit the topics of the event. The EAPPC-BEAMS-EML 2024 Exhibition will be held during the event. Coffee breaks and Lunches will be served in the exhibition hall. EAPPC-BEAMS-EML 2024 Exhibitors' booths will be allocated on first come first serve basis and after approval of the Organizing Committee. The Organizing Committee retains the right to move the lay out and/or allocation of booths according to the number of bookings, and after informing all the sponsors/exhibitors.

#### Payment

Deadline for application and payment for the sponsorship fee is May 31, 2024. A deposit of 50% of the amount must be paid upon application. The remaining balance must be paid before May 31, 2024 at the latest. Please make sure that payments are made in Euros, net of any bank charges, and that your payment is indicated clearly, mentioning "EAPPC-BEAMS-EML 2024" together with your name and organization. Services provided are mentioned VAT excl. (Dutch VAT at 21ss%).

#### **Invoice and Technical Guide**

After reception of the signed sponsorship agreement and payment, a paid invoice will be sent to the Sponsor. A technical guide with information related to the exhibition will be sent after reception of the payment.

#### Cancellation

Any cancellation must be made in writing to Eindhoven University of Technology. If received before 15 April 2024, the booking fee will be reimbursed after deduction of 10% (VAT excl.) to cover administrative expenses. Past this date, no refund will be made.

#### Insurance

The Organizer disclaims all responsibility against any potential damage or any theft of the Exhibitor's equipment, occurring notably between its arrival and its removal and for which the Exhibitor would have subscribed necessary and required insurance. The Sponsor declares having subscribed the following insurance policies, covering him as well as his company and any person participating directly or indirectly in the exercise of his activity against any potential risk for him and his equipment (personal belongings, exhibited equipment and any other material brought to EAPPC-BEAMS-EML 2024 Conference):

- Civil-liability insurance
- Insurance for theft covering the total value of the exhibited equipment
- Any other insurance covering the civil-liability and any corporal, material or immaterial damage, caused to other people
  during their participation to the conference (including setting up and dismantling periods)

This insurance becomes effective once the Sponsor/Exhibitor's equipment is delivered.

## **Supervision & Safety**

Security in case of fire and people's assistance will be ensured. Badge wearing is compulsory during the event. Sponsors/Exhibitors are informed that booths must comply with security standards. It is mandatory to use materials complying with the usual security norms. The use of gas or any combustible material is strictly forbidden.

## Force Majeure

In case of force majeure, the dates and/or venue of EAPPC-BEAMS-EML 2024 could change or be cancelled. In case of cancellation, the amounts paid will be dispatched between the Sponsors after payment of the expenses committed by the Organizing Committee.

## **Disputes and Applicable Law**

The present Sponsorship agreement is governed by Dutch Law. In case of disagreement, the Organizing Committee and the sponsor will do their best to settle it out of court. If not, the disagreement shall be settled under the rules of arbitration of the court of 's-Hertogenbosch, The Netherlands.

<b>Datas</b>	and	libe	rties

	By ticking this box, you allow the Organizer to include your company/affiliation name, your surname, name, city, country and
	e-mail address to be circulated on the occasion of the EAPPC-BEAMS-EML 2024.
Plea	se initial