



11th International Conference
**FRONTIERS OF PLASMA PHYSICS
AND TECHNOLOGY (FPPT-11)**

May 5-9, 2025, Dubrovnik, Croatia

**Hosted by the Plasma Science Division,
Croatian Vacuum Society, Zagreb, Croatia.**

First Announcement

<https://www.fpptseries.org>



The UNESCO World Heritage Site, Dubrovnik.

Conference Directors: Profs. (MS.) Tara Desai (Chair), Prakash Patil and Nikša Krstulović.

Executive Committee: Profs: R. Fedosejevs (Canada), D. Hoffmann (Germany), J.T. Mendonca (Portugal), S. Nakai (Japan), M. Perlado (Spain), A. Sen (India), B. Sharkov (Russian Federation).

International Advisory Committee: Profs. V. Malka, Chair (Israel), U. Cvelbar (Slovenia), Y. Gu (P.R. China), R. Khanal (Nepal), P. Norreys (UK), M. Rakić (Croatia), (MS.) C. Riccardi (Italy), U. Schramm (Germany).

International Scientific Committee: Profs. T. Ozaki, Chair (Canada), S. Gupta (India), S. Karsch (Germany), P. McKenna (UK), F. Porcelli (Italy), B. Shen (P.R. China), (MS.) S. Ercegović Ražić (Croatia), (MS.) V. Stancalie (Romania).

National Organising Committee: N. Krstulović (Chair), J. Car, (Ms.) A. Ludaš Dujmić and (Ms.) R. Radicić.

About the previous conferences: The earlier conferences were held in India (Bangalore-2002, Goa-2005), Thailand (Bangkok-2007), Nepal (Kathmandu-2009), Singapore (2011), Botswana (Gaborone-2013), India (Kochi-2015), Chile (Viña del Mar-2017), Sri Lanka (Negombo-2019) and Nepal (Kathmandu-2023). The success of the preceding conferences in Asia, Africa and Latin America has persuaded us to further our mission.

Topics: The emphasis of the conference will be on all the frontier topics of plasma physics conferences and technologies and classified in the following three tracks but not limited to:

Track I. Fundamental plasmas: Astrophysical, cosmic and space plasmas; condensed and extreme state matter; high energy density matter; laboratory astrophysical, planetary, supernova: magnetic reconnection, nonlinear plasma waves, turbulent plasmas; physics of natural disasters, radiation transport in plasmas at extreme conditions, etc.

Track II. Advances in Nuclear Energy: Magnetically confined plasmas, inertial fusion plasmas, nuclear physics under transient state, recent progress in nuclear fusion studies, target and reactor physics, Renewable energy, unconventional energy sources, Z pinch, hybrid (fission plus fusion) reactors, etc.

Track III. Innovative trends in applications and technologies: Technological innovations leading to newer applications, Generation of novel plasma, neutron, laser and x-radiation sources, advances in particle/photon acceleration, progress in nanotechnologies, laser-plasma interaction, development of high accuracy diagnostics, applications in agriculture, biology, chemistry, climate and environment, health, industries, safety, present and future of nuclear waste management and safety, and application of vacuum technology in plasma research etc.

Some of the confirmed speakers include. Th. Belmonte (France), A. Bret (Spain), S. Bulanov (Czech Rep), C. Carr (Australia), M. Chaker (Canada), S. Cipiccia (UK), U. Cvelbar (Slovenia), R. Fedosejevs (Canada), A. Fukuyama (Japan), B. Gakovic (Rep. Serbia), C. Gao (P.R. China), Y. Gu (P.R. China), D. Hoffmann (Germany), Y. Hou (P.R. China), S. Karsch (Germany), R. Khanal (Nepal), G. Loisel (USA), X. Lu (P.R. China), D. Margarone (Czech Rep), J.T. Mendonca (Portugal), W. Miloch (Norway), B. Nagler (USA), P. Norreys (UK), T. Ozaki (Canada), C. Palmer (UK), F. Porcelli (Italy), M. Perlado (Spain), I. Bogdanovic Radovic (Croatia), M. Rakic (Croatia), S. Ercegović Ražić (Croatia), C. Riccardi (Italy), G. Sarri (UK), U. Schramm (Germany), B. Shen (P.R. China). T. Tadic (Croatia), S. Vinko (UK) and many other confirmations are awaited.

Conference registration: The registration form is enclosed at the end of this announcement. Kindly submit to the conference Secretary on or before December 15, 2024, at office@fpptseries.org

Abstract Submission: Kindly submit a one-page abstract electronically to the conference Secretary before January 15, 2025, at office@fpptseries.org

Abstract format: Paper size: Standard A4. Page set-up: Margins: top 2.5 cm; bottom 2.5 cm; left/right 2.5 cm. Title of the abstract in capital letters, bold, centred using Times New Roman with font size 14. Leave 2-line space. The author's name in font size 12 and centred. Leave 1 line space. The institute's name is in font size 10 and centred. 2-line opening before commencing the abstract with font 12 (justified).

Text size should be with single spacing. References, if any, should be given in Arabic numerals in the square bracket, and avoid figures if possible. Please provide the name and email of the corresponding author at the end of the abstract.

Kindly prepare the abstract as per the guidelines in an editable M.S. Word or equivalent software for the ease of necessary editorial work if required. All the abstracts will be peer-reviewed under the supervision of the International Scientific Committee.

Publication: High-quality articles presented during the conference will be published in a special issue of the Elsevier journal "Fundamental Plasma Physics" titled "Frontiers of Plasma Physics and Technology 2025 (FPPT-25)". *It is not a conference proceeding.*

This will be in line with the first special of its kind, FPPT-23, published following the FPPT-10 held in Kathmandu in March 2023, see the special issue webpage, <https://www.sciencedirect.com/special-issue/10XSFZJ7JHZ>

Elsevier Young Scientist Awards: The journal *Fundamental Plasma Physics* by Elsevier will present two Young Scientist Awards to researchers under the age of 40. Each award includes "A certificate of recognition and a prize of US\$500". Recipients will be selected by an expert committee, based on the quality of their research and its potential impact on advancing global research and development in the field.

The requirements for participating in the award are as follows:

1. Participants must be registered and present an oral talk or a poster at the conference.
2. Eligible participants must be either current PhD students or recent PhD graduates (degree obtained not earlier than May 2021).
3. Participants wishing to be considered for the award must indicate their interest on the conference registration form.
4. An appropriate committee will select two winners based on the impact of their work on the ongoing research field and the quality of their presentation (oral or poster). The winners will be announced during the closing ceremony of the conference.

Forthcoming important dates:

Registration (form enclosed):	December 15, 2024, Early reg preferred.
Abstract submission:	January 15, 2025 or earlier
Author notification on the abstract:	January 30, 2025
Second announcement:	March 10, 2025
Scientific programme:	April 10, 2025
Final announcement:	April 10, 2023
Registration on desk:	May 05, 2025

Conference registration fee: The registration fee is 625 Euro and late reg. fee 650 Euro. The student reg fee is 525 Euro. The details for the transfer of the amount will be communicated later. The reg. fee covers attendance to all sessions, conference material, daily two coffee/Tea breaks, a welcome reception, a banquet, and four lunches during the conference days.

The Conference is self-financed. Delegates are requested to make their financial arrangements.

Conference accommodation: Organizers are finalizing a suitable accommodation for the conference delegates which will be communicated later.

Croatia in brief:

Location: Croatia is a Southeast European country located along the Adriatic Sea, bordering Slovenia, Hungary, Serbia, Bosnia and Herzegovina, and Montenegro. Croatia is comprised of more than 1,100 islands and islets. The country stretches between the rugged Dinaric Alps mountains in the east and the 1,800 km long Adriatic coastline to the west. The coastline boasts crystal clear, cobalt-blue waters and white sandy beaches. Tourism thrives in historic cities like Dubrovnik and Split along the coastline.

The name Dubrovnik is derived from the Croatian word Dubrava, meaning oak woods which surrounded Dubrovnik in the past. Slavonian oak is the National tree of Croatia.

Dubrovnik is aptly called the Gem of the Adriatic due to the beautiful Gothic, Renaissance and Baroque architecture monuments, palaces and churches, the natural outstanding Mediterranean scenery, and the mild climate all year long.

History: Croatia's heritage spans over two millennia, beginning with Illyrian settlements around the 1st millennium BC, Romans, Habsburgs and later part of the Austro-Hungarian Empire until World War I. The region was shaped by its rich heritage reflected in its Roman ruins, medieval fortresses, Dubrovnik's mighty city walls, and Baroque architecture. By the 10th century, Croatia emerged as a medieval kingdom, manifesting a distinct identity through various cultural and political influences, with Dubrovnik as a major maritime city-state.

Language: The official language of Croatia is Croatian, a South Slavic language written in the Latin script. Croatian is a member of the Slavic branch of Indo-European languages. It has several dialects. Minority languages like Serbian, Italian, Hungarian, and Czech are also spoken in regions with significant minority populations. English is widely understood.

Political: Croatia's population is about 4 million and Zagreb is the capital. After World War I, with the fall of the Austro-Hungarian Empire, Croatia joined Yugoslavia but declared independence in 1991. It joined the European Union in 2013.

Climate: In May, Dubrovnik experiences pleasant spring weather, with temperatures typically ranging from 15°C to 24°C. The city enjoys plenty of sunshine, making it an ideal time to explore its historic sites before the peak summer crowds arrive. Rainfall is moderate, and the sea begins to warm up, offering the opportunity for swimming.

Croatian Time zone: In May, Croatia operates on (CEST), that is GMT+2.

Cuisine: Croatian highly palatable cuisine is diverse and regionally influenced, with coastal areas like Dubrovnik in Dalmatia showcasing a strong Mediterranean flair. Seafood dishes such as grilled fish, octopus salad, and black risotto are local favourites, while inland regions reflect Austrian and Hungarian influences with hearty meat stews and pastries.

Dubrovnik offers a variety of non-vegetarian and vegetarian dishes. Local alcoholic drinks like rakija, a fruit brandy, and Croatian wines from the Pelješac Peninsula complement the rich culinary traditions of the Adriatic coast.

Scenic and sportive: Croatia is renowned for its stunning natural beauty, featuring a diverse landscape of pristine beaches along the Adriatic coast, with Dubrovnik's coastline being particularly picturesque. Inland, the country boasts lush forests, rolling hills, and dramatic mountain ranges, including the Dinaric Alps. The varied terrain makes Croatia a haven for outdoor sports enthusiasts, offering activities such as hiking, mountain biking, and rock climbing, as well as water sports like sailing, kayaking, and diving.

The unique Dubrovnik. The gripping Beauty of the Dalmatian coast offers an unforgettable adventure. There are several one-day trips from Dubrovnik. Blue Cave & Sunj Beach, Elaphite Island Cruise, Korčula, the birthplace of the explorer Marco Polo, Lokrum Island, Mostar and Kravica Waterfall, Montenegro and Slovenia the neighbouring countries, old town walking, At the end of the stay, every visitor feels to be back to explore more.

Banking in Croatia: The Euro is the Croatian Currency with widespread use of credit cards such as Visa and Mastercard in hotels, restaurants, and shops. Most major banks offer competitive foreign exchange rates.

Visa to Croatia: When visiting Croatia visa may be required. Immigration requirements typically include a valid passport for at least 6 months and other documents depending on your nationality. For the latest visa requirements and detailed information, visit the official website of the Ministry of Foreign and European Affairs of Croatia at <https://mvep.gov.hr/consular-information-125335/visas-180242/180242>.

EU citizens, the US, Canada, and several other nationals can enter Croatia visa-free for short stays.

Please check current regulations before your trip, as policies can change.

Delegates requiring visas kindly write in advance to the secretary, email: office@fpptseries.org and the necessary letter will be issued by the local host.

Contact:

Prof. Tara Desai director@fpptseries.org

Secretary: office@fpptseries.org



Welcome to FPPT-11, Dubrovnik



11th International Conference

FRONTIERS OF PLASMA PHYSICS AND TECHNOLOGY (FPPT-11)

May 5-9, 2025, Dubrovnik, Croatia

Registration Form

(The last date for the receipt of the registration form is **December 15, 2024**)

1. Name of the participant

Family name:

First name:

Middle name:

Title (Prof./Dr./Mr/Ms.)

2. Nationality:

3. Address for Correspondence:

Institute address:

Fax:

Tel:

E-mail:

4. Gender (Male / Female):

5. Title of the Abstract (Tentative):

6. Track of the Topic I/II/III:

7. Name(s) of the accompanying person(s) if any:

Young scientists under the age of 40 who wish to participate in the **Elsevier Young Scientist Awards** are kindly requested to complete the following additional information.

- Presentation option:
a) Poster b) Oral (subject to availability of time)...
- Date of birth:

Kindly send the registration form to the conference secretary, office@fpptseries.org

Further information will be sent to all the registered participants.

.....