



# icpeac 2023

# XXXIII International Conference on Photonic, Electronic and Atomic Collisions

Ottawa, Canada



# > WELCOME

It is our pleasure to invite you to participate in the XXXIII International Conference on Photonic, Electronic and Atomic Collisions, to be held in Ottawa, Ontario, Canada from July 25 to August 1, 2023.

ICPEAC 2023 is expected to bring together more than 500 scientists from all over the world whose research is concerned with collisions involving photons, electrons, atoms, ions, molecules, clusters, surfaces, exotic particles, and ultracold matter and with attosecond and strong-field atomic and molecular physics and related areas. An excellent slate of invited speakers has been assembled and we are working hard to make it all happen in a safe and pleasant environment. At this time, we plan for ICPEAC 2023 to be held in person, and we are excited to host the meeting in Canada's capital, a city with a rich cultural life and many attractions, which will delight you with its welcoming spirit and charm.

Please mark your calendars, take note of the important dates listed below, and be part of ICPEAC 2023 in the Shaw Centre, Ottawa's new and awardwinning convention centre, beautifully located in the downtown area.

We look forward to seeing you in Ottawa!

Tom Kirchner (Chair of the Local Organizing Committee)

André Staudte (Co-Chair)

François Légaré (Co-Chair)

#### > IMPORTANT DATES

2<sup>nd</sup> announcement & call for abstracts

January 2023

Registration

opens in February 2023

Abstract submission deadline

March 10, 2023

Deadline for requesting financial support

March 10, 2023

Early registration deadline

May 2023

The 2<sup>nd</sup> announcement will include guidelines for abstract submission, the preliminary invited program and detailed information on the conference format, travel, visas, accommodations, and weekend tours. Make sure that you receive it by signing up to our mailing list.

Conference website: www.icpeac2023.ca

Conference email: info@icpeac2023.ca





# Scope and Overview

ICPEAC has a long history dating back to 1958 when the first meeting was held in New York City. Since 1961, ICPEAC has been held every two years on five continents, and has grown to attract as many as 800 participants.

The conference brings together the world's leading scientists who are working in the field of collisions involving photons, electrons, ions, atoms, molecules, clusters, surfaces, and exotic particles. They will present their latest research on topics such as ultrafast dynamics at the femto- or attosecond scale, electron- and ion-induced radiation damage of biomolecules, atomic spectroscopy and molecular physics of antimatter, free electron lasers, particle acceleration generated by high-power lasers, ultracold collisions, and fundamental issues of atomic and molecular few-particle dynamics.

The ICPEAC program will consist of at least one public lecture, five plenary lectures, four tutorial lectures, more than 60 invited progress reports, a smaller number of special reports selected from the contributed abstracts, and several hundred posters. Plenary talks are of general interest to all participants. Progress reports and special reports will be arranged in two parallel sessions and are intended to provide an in-depth view of the current state of research across the different topics of the ICPEAC community. The tutorial lectures target students and young postdocs and will provide pedagogical accounts of selected ICPEAC research areas. The conference language is English.

## Abstracts

ICPEAC 2023 will welcome abstracts for regular contributions from the whole community. The abstracts will be reviewed by the Program Committee and gathered in a Book of Abstracts, which will be posted on the conference website. A small subset will be selected as special reports to be delivered in appropriate oral sessions, while the others will be assigned to poster sessions. Abstract templates will be made available on <a href="https://www.icpeac2023.ca">www.icpeac2023.ca</a> when the submission portal opens in January 2023. Invited (tutorial, plenary, progress report) speakers will be provided with special abstract templates.

#### > ICPEAC Topics

Broad topics will include, but are not limited to:

- Photon impact—weak fields (synchrotron, FEL)
- Photon impact—strong fields(femto/ attosecond physics)
- Electron collisions with atoms, molecules and ions
- Collisions between ions, atoms and molecules
- Anti-matter & other exotic particle collisions
- Field-assisted collisions
- Ultracold atomic and molecular physics
- Collisions involving surfaces and condensed matter
- Experimental techniques

#### Plenary Lectures

- Amine Cassimi, CIMAP laboratory, CEA/ CNRS/ENSICAEN/UNICAEN, France
- Lorenz S. Cederbaum, University of Heidelberg, Germany
- Alexander Dorn, Max-Planck-Institut für Kernphysik, Germany
- 🛨 Ursula Keller, ETH Zürich, Switzerland
- Kenji Ohmori, Institute for Molecular Science, National Institutes of Natural Sciences, Japan

#### Tutorial Lectures

- Paul B. Corkum, University of Ottawa, Canada
- Emily Lamour, Sorbonne Université, France
- Eva Lindroth, Stockholm University,
  Sweden
- Jonathan Tennyson, University College London, UK

# > Travel information

Ottawa Macdonald-Cartier International Airport is Canada's sixth-busiest airport with many daily domestic and international flight options. It is located in the south end of the city approximately 10 km away from the downtown core. Ottawa can also be reached by train or car from Montreal (in approximately two hours) and Toronto (in four-to-five hours), the two largest cities in Canada.

Ottawa has a continental climate with warm summers. Average maximum and minimum temperatures in July are around 26 °C (79 °F) and 17 °C (63 °F).



# >> Visas

Most people need a visa or an Electronic Travel Authorization (eTA) to travel to Canada – not both. Some people may only need their valid passport. Find out what you need by going here. Participants who require a visa are advised to start the application process well in advance of the conference. Invitation letters for visa purposes will be issued to registered delegates upon request.

# >> The City of Ottawa

Ottawa is the capital of Canada and is located on the south bank of the Ottawa River in south-eastern Ontario, Canada's most populous province. About one million people live in the city of Ottawa, and about 1.5 million in the metropolitan area. Ottawa is a popular tourist destination with a rich cultural life, world-class museums, a number of historic and heritage sites and beautiful nature that surrounds the city. Top attractions in-

clude the ByWard Market, a retail and entertainment district that consists of a local farmers' market, art galleries, restaurants and bars, the National Gallery of Canada, the Canadian Museum of History, and Parliament Hill with its emblematic Gothic revival suite of buildings. Outdoor activities include hiking, cycling, canoeing, white water rafting, kayaking, sailing and, of course, swimming.



#### Accommodations

Ottawa offers a broad range of hotel and other accommodation options, many of which are in walking distance to the Shaw Centre. More detailed information will be available on the conference website short-

ly and will also be included in the second announcement.



# > Conference Venue

ICPEAC 2023 will be held in the Shaw Centre, Ottawa's award-winning convention centre opened in 2011. The Shaw Centre is beautifully located alongside the Rideau Canal, a UNESCO World Heritage Site, and boasts spectacular views of Ottawa's city centre and Parliament Hill, the home of Canada's federal government.









# Social Program

The social program will include a welcome reception, a public lecture, and a conference dinner. The cost of the welcome reception is included in the registration fee. Conference dinner tickets will be available at an extra cost. The weekend is reserved for sightseeing and excursions.

Just one hour west of the Capital the mighty Ottawa river is home to one of the best whitewater rafting in Canada with class III to V rapids. And it is warm whitewater!

The vibrant city of Montreal is only a 2-hour drive east of Ottawa. And Toronto and the Niagara Falls are within driving distance for the weekend as well.





# >> Public Lecture

A public lecture will be delivered by Canada's most recent Nobel Laureate in Physics, Professor Donna Strickland from the University of Waterloo.



# > SATELLITE MEETINGS

ICPEAC has a long tradition of being accompanied by thematically focused satellite meetings. During the days just before and after ICPEAC 2023, we expect the following satellite meetings to be organized in Canada and the United States. Up-to-date information is available on the conference website: <a href="www.icpeac2023.ca">www.icpeac2023.ca</a>

#### **ISIAC**

28<sup>th</sup> International Symposium on Ion-Atom Collisions

July 21-23, 2023, Rolla, Missouri (USA)

Michael Schulz and Daniel Fischer (Missouri University S&T)

# **ISWAMP**

7<sup>th</sup> International Symposium on Intense Field, Short Wavelength Atomic and Molecular Processes

July 21-23, 2023, St.Sauveur, Quebec

François Légaré and Heide Ibrahim (INRS), and André Staudte (NRC & University of Ottawa)

#### **EPIC-MAN**

2<sup>nd</sup> Symposium on Electron, Photon and Ion Collisions on Molecular and Atomic Nanostructures

July 24, 2023, Ottawa, Ontario

Richard Wilhelm
(TU Wien)
and
Thomas Brabec
(University of Ottawa)

# **POSMOL**

XXI International Workshop on
Low Energy Positron and Positronium
Physics and XXIII International Symposium on
Electron-Molecule Collisions and Swarms

August 3-6, 2023, Notre Dame, Indiana (USA)

Sylwia Ptasinska (University of Notre Dame) and Daniel Slaughter (LBNL)

#### COPIAMC

22<sup>nd</sup> International Symposium on Correlation, Polarization and Ionization in Atomic and Molecular Collisions

August 3-5, 2023, Toronto, Ontario

Marko Horbatsch (York University) and Klaus Bartschat (Drake University)

## **>**

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