Second Announcement CCPEACCONFERENCE ON PHOTONIC, ELECTRONIC AND ATOMIC COLLISIONS



Cairns, Tropical Queensland, Australia, July 26 – August 1, 2017



for more information, visit us online: WWW.ICPEAC30.EDU.AU

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AN INVITATION TO ATTEND ICPEAC XXX

Dear Colleagues

You are invited to participate in the 30th International Conference on Photonic, Electronic and Atomic Collisions (ICPEAC) to be held in Cairns, Tropical Queensland, Australia from Wednesday 26 July to Tuesday 1 August 2017, at the Cairns Convention Centre.

ICPEAC XXX will bring together over 500 scientists from all over the world who work actively in the fields of collisions involving photons, electrons, ions, atoms, molecules, clusters, surfaces, and exotic particles. Recent expansions of the conference scope include collision with cold targets and attosecond science.

We are delighted to host ICPEAC XXX in the resort town of Cairns, the gateway to the Great Barrier Reef, the largest coral reef ecosystem on earth and a World Heritage area. We look forward to seeing you there.

Anatoli Kheifets Professor Anatoli Kheifets Australian National University Local Committee Chair

Igor Bray

Professor Igor Bray Curtin University Local Committee Co-Chair





WHAT IS THE CONFERENCE?

The 30th International Conference on Photonic, Electronic and Atomic Collisions (ICPEAC XXX) will continue the nearly sixty-year history of the ICPEAC series which began in New York, USA, in 1961 and which has been held biennially since then. In 2017, Australia gratefully receives the baton from Spain.

The conference regularly attracts more than 500 participants from all over the globe including the world's leading scientists, upcoming students and researchers and representation from major universities, research centres and industry.

Some information about ICPEAC origins, past and future conferences, International Officers and Committees can be found on the <u>ICPEAC Central</u> <u>website</u>.

WHAT IS IN THE PROGRAM?

The ICPEAC program will consist of 5 plenary lectures, 63 progress reports and 26 special reports (hot topics), held in two parallel sessions. The special reports are selected from the submitted abstracts to showcase the most recent developments. Additionally, about 800 posters will be presented in 5 poster sessions.

Broad topics will include, but are not limited to:

- Photon impact (weak field)
- Photon impact (strong field and attosecond science)
- Electron-atom collisions
- Electron-molecule collisions
- Electron-ion collisions
- Collisions involving exotic particles
- Ion-atom collisions
- Atom-atom and ion-ion collisions
- Ion-molecule and atom-molecule collisions
- Field-assisted collisions
- Ultracold atomic and molecular physics
- Collisions involving condensed matter
- Experimental techniques

WHERE WILL IT BE HELD?



ICPEAC XXX will be held at the Cairns Convention Centre, an award-winning facility in the waterfront area of tropical Cairns, Queensland. It is a popular tourist hub because of its proximity to the Great Barrier Reef and the World Heritage rainforests. Cairns has a tropical climate with daytime temperatures around 25°C (77°F) in July, which is ideal for a range of activities including scuba diving, snorkeling, sailing, water rafting, canoeing, hot air ballooning and enjoying aboriginal culture and exotic Australian wildlife.



Cairns has well-developed tourism infrastructure with a multitude of hotels and guesthouses to suit every budget. Most of the accommodation options, from 5 star hotels to backpacker lodges, are within walking distance to the city and the conference venue. A selection of hotels will be offering special conference rates which will be available to delegates when they register. Local attractions include the botanical gardens, art galleries rich in aboriginal art, promenades, shopping centres, restaurants and markets.

SOCIAL PROGRAM

Traditionally, ICPEAC has a vigorous social program. It starts with a welcome reception on Tuesday 25 July, continues with a public lecture of general interest on Wednesday 26 July, weekend tours on Saturday 29 July and Sunday 30 July, and concludes with a conference dinner on Monday 31 July. All of these activities will be held at the Cairns Convention Centre. The public lecture is free. The cost of the welcome reception is included in the full, student and accompanying person registration fees and conference dinner tickets can be purchased at a subsidised rate. For more information on accompanying person registration, please see page 6.

The close proximity of Cairns to the natural wonders of the Great Barrier Reef and the World Heritage rainforests offers great opportunities for the weekend sightseeing tours. The tours are at an additional cost and a special 10% discount is available to all attending delegates and accompanying persons.

Saturday 29 July

Great Barrier Reef Adventure Adult \$210 pp Child (3 – 14 yrs) \$110 pp

The beauty of the Great Barrier Reef is yours to experience when you cruise from Cairns to our luxury 3 level pontoon on the Outer Reef. Escape into a world of surprises to experience the breathtaking beauty of the Outer Great Barrier Reef. From the comfort of the stable reef activity platform, this is the perfect base for swimmers and non-swimmers to explore. Snorkel and dive, visit the underwater observatory and cruise in a semi-sub, or just relax on the sundeck with a delicious buffet lunch.

Green Island Half Day Adult \$84 pp

Adult \$84 ppChild (3 – 14 yrs) \$44 ppGreen Island is a beautiful 6000 year old coral cay located in the Great BarrierReef Marine Park - a premier world heritage site and one of the Seven NaturalWonders of the World. Aboard Great Adventures' fast catamaran journey fromCairns, you can be there in just 45 minutes! Green Island's unique reef andrainforest environment awaits to provide the one-stop tropical island experience.Revel in an array of activities or relax and let your day unfold in this tropical

paradise. Stroll through magical rainforest, laze on white coral sand beaches, swim, dive or snorkel.

Sunday 30 July

Kuranda Rail, Skyrail & Hartleys Crocodile Adventure Adult \$176 pp Child (3 – 14 yrs) \$92 pp

Start your day with an historical rail journey to Kuranda, enjoying breathtaking views across the cane fields of Cairns to the tropical rainforest of Kuranda. Upon arrival in Kuranda, there is limited free time to explore this quaint village. Here you board the Skyrail Rainforest Cableway taking you on an experience over World Heritage listed Wet Tropics Rainforest. Enjoy birds-eye views as you glide

just meters over the canopy, before exploring the forest floor and learning more about your surroundings at two rainforest stations. A coach is waiting at Smithfield terminal to transfer you to Hartley's. Hartley's Crocodile Adventures is the best place to see crocodiles in Tropical North Queensland! Then it's time to explore the remainder of the park. Highlights of the Park include the Wetlands Cruise, Crocodile Attack Show and Snake Show.







Cape Tribulation & Daintree Adult \$177 pp Child (3 – 14 yrs) \$112 pp

Enjoy a day exploring the rainforest and amazing landscapes of the Cape Tribulation wilderness are with a Daintree river cruise, stop at Alexandra Lookout, a tropical lunch, walk at Cape Tribulation and finish the day with a visit to Mossman Gorge Centre to learn about the fascinating secrets of one of the oldest rainforests in the world.

<u>Click here</u> to find out more information and book your tours.

#thisisqueensland #exploretng

PUBLIC LECTURE – WEDNESDAY 26 JULY

Australia, the land of things that bite, sting and kill! Is it really that bad?

Dr Jamie Seymour



Associate Professor Jamie Seymour or the "Jelly Dude from Nemo land" has been researching and working with venomous and dangerous animals for over 20 years with his present interest being "Why do animals have venom?" Based in Cairns, in Northern Australia, an area that has an overabundance of venomous animals, he is uniquely placed to study the ecology and biology of Australia's venomous species. He teaches at all levels at James Cook University, one of the top 5% of research universities in the world with his favourite subject being "Venomous Australian Animals".

IMPORTANT DATES

Call for abstracts:	19 December 2016
Close of abstract submission:	20 February 2017
Financial support application:	20 February 2017
Notification of acceptance:	April 2017
Letter of invitation request:	April 2017
Tentative Program released:	April 2017
Early bird registration deadline:	19 May 2017
Accommodation booking deadline:	23 June 2017
Presenter registration deadline:	30 June 2017
Manuscript submission (invited speakers only):	July 2017
Close of proceedings submission:	1 Aug 2017

REGISTRATION

All participants, including invited speakers and session chairs, are required to register online for ICPEAC XXX via the <u>registration site</u>. If you need any assistance with the registration site please contact the conference secretariat via <u>icpeac30@conlog.com.au</u> or +61 2 6281 6624.

Conference registration is not valid until receipt of payment.

Registration Fees

All prices are given in Australian dollars. The conversion rates as of January 2017 are as follows: 1AU\$ = 0.71€ = 0.75US\$ = 0.62£ (<u>up-to-date rates</u>)

Registration Type	Early bird (before 19 May)	Standard (after 19 May)
Full	\$700	\$855
Student*	\$400	\$555
One Day	\$300	\$300
Accompanying Person	\$195	\$195
Conference Dinner - standard	\$80	\$80
Conference Dinner - student	\$50	\$50
Welcome Reception – additional	\$50	\$50

*students are requested to send proof of Student ID to icpeac30@conlog.com.au

Inclusions:

Both **standard and student registration** fees include access to the welcome reception, conference and poster sessions, public lecture, exhibition, morning and afternoon teas, internet access, a printed conference handbook and a USB containing the complete conference program including abstracts.

The **one day registration** fee includes access to the conference and poster sessions, exhibition, morning and afternoon teas, internet access for your nominated day, as well as a printed conference handbook and a USB containing the complete conference program including abstracts.

The **accompanying person registration** fee includes access to the welcome reception on Tuesday, Australiana themed Partners Welcome on Wednesday, the public lecture on Wednesday evening and morning and afternoon teas throughout the conference. Accompanying person registrations can be purchased separately via the <u>conference website</u>. Also, day tours on Thursday, Friday, Monday and Tuesday have been organised at a discounted rate. <u>Click here</u> to find out more information and book your tours online.

Please note the conference dinner is not included in any of the registration types. Tickets can be purchased through the online through the registration process.

Onsite registration and information Desk

The registration desk at the Cairns Convention Centre will be open from Tuesday 25 July 2017 from 15:00 to 20:00 and during the conference from 08:00 to 18:00. Onsite registration is possible with payment of the registration fee by credit card (VISA, MasterCard and American Express).

Payment

The payment page is the last stage of the online registration process. It is possible to request a tax invoice for EFT payment or you can pay using the following credit cards: VISA, MasterCard and American Express. If paying by International EFT, you will need to elect to pay the International Monetary Transfer fee of \$20.

Cancellation and Refund Policy

Delegates who find themselves unable to attend ICPEAC XXX after submitting a registration form are most welcome to nominate a substitute. All substitutions and cancellations must be made in writing to icpeac30@conlog.com.au. Cancellations received before 25 May 2017 will be refunded, less an administration fee of \$99. Cancellations received between 25 May 2017 and 25 June 2017 will be refunded 50% of the registration fee. Cancellations after 25 June 2017 are not refundable. Exceptions are at the discretion of the Organising Committee. No refunds will be made in case of cancelled sessions or program changes.

Financial Support Policy

Limited funds are available to support participants presenting invited talks or posters. Participants from developing regions and students will be prioritised. An application letter with signature should be submitted to icpeac30@conlog.com.au before 20 February 2017 (ATTN: ICPEAC Financial Support). Applicants will be notified of the outcome of the decision by March 2017.

Participants from developing regions must submit the application stating their citizenship, affiliation, professional status, personal data, and the amount of support requested.

Students must submit the application stating their citizenship, affiliation, personal data, and the amount of support requested. The application must be accompanied by a recommendation letter from the student's supervisor or the head of the department.

ICPEAC PRIZES

In addition to the financial support described above, two prestigious prizes for young scientists will be awarded at the XXX ICPEAC in Cairns:

- 1) The IUPAP Young Scientist Prize in Atomic, Molecular, and Optical Physics
- 2) The Sheldon Datz Prize for an Outstanding Young Scientist attending ICPEAC

Please see the ICPEAC Central Website for further details and instructions on how to apply: http://www.ucd.ie/icpeac/icpeac.html

VISAS

All visitors to Australia (except for New Zealand passport holders) must have a valid visa. Please refer to the following documents for more information:

- Business Fact Sheet: for guidance on the visa options that may be most suitable for you
- Visa Application Requirements Factsheet: for information on visa application requirements.

It is suggested that all visitors should apply for a visa at least two months prior to their intended date of departure, and four months prior for people with character or health concerns.

If you require assistance with your visa application, please provide Conference Logistics with your passport details (country of passport, passport number, current country of residence and name in full as it appears on your passport) via email at icpeac30@conlog.com.au, these details will then be forwarded to the Australian Department of Immigration and Border Protection. However you will still need to register for the conference and make your own visa application through your nearest Australian Embassy.

LETTERS OF INVITATION

Letters of invitation will be sent upon request to <u>icpeac30@conlog.com.au</u>. Please make sure you include your full address. Invited speakers may request a letter starting 21 January 2017. For participants submitting contributed abstracts, requests should be made as soon as possible after receiving notification of acceptance.

Please note that such an invitation letter does not imply any obligation, financial or otherwise, by ICPEAC XXX.

SPONSORS AND EXHIBITORS

We would like to extend a big thank you to all of our sponsors:

Major Sponsors





Other Sponsors







ARC Centre of Excellence for Antimatter-Matter Studies



Exhibitors can display their products such as scientific equipment, science books and/or specialised journals at the conference. These displays will be located in the same area as the poster sessions.

A copy of the sponsorship and exhibition prospectus is available on the <u>website</u>. Please contact <u>icpeac30@conlog.com.au</u> if you are interested and would like any further information.

AIRPORT

Cairns International Airport is located about 7km (about 20 minutes by car) north of Cairns. You can take a taxi (approx. \$25 to Cairns City Centre), shuttle bus or the Airport Connect bus (\$4 one way) that links you to the Cairns public transport network.

More detailed information regarding local transport will be provided closer to the conference.

ACCOMMODATION

Cairns has a range of accommodations located in the central area, a short walk from the Convention Centre, and about 8km from the airport. Less expensive hotels tend to be further away from the Convention Centre. More details can be found in the <u>Cairns Convention Centre Cairns & Region Accommodation Guide</u>.

The following accommodation will be available to book via the online registration process.

Special accommodation rates have been secured for delegates attending the Conference. To receive these special rates accommodation must be booked when registering online. All rates are per room per night unless otherwise specified and are in Australian dollars. Breakfast is not included in room rates. All the prices are GST inclusive.



Pullman Cairns International

Room Costs (per night) City Mountain View - \$209 Harbour View - \$229 Premium Harbour View - \$279

Distance from conference venue: 7 minute walk Location: 17 Abbott Street, Cairns www.pullmanhotels.com

Enjoy 5-star Cairns accommodation in Tropical North Queensland. Swim in the tropical pools, enjoy a relaxing treatment in Vie Spa or dine on the best local seafood in Coco' Restaurant. This hotel is located in the heart of Cairns CBD, and close to the departure point for daily trips to the Great Barrier Reef and other natural attractions.



Park Regis City Quays

Room Costs (per night) Superior One Bedroom Apartment - \$195 Superior Two Bedroom Apartment - \$285 *GST not applicable*

Distance from conference venue: 4 minute walk Location: 6 – 8 Lake Street, Cairns www.parkregiscityquays.com.au

Park Regis City Quays invites you to discover Cairns and surrounds by providing the ultimate base during your visit. With the Esplanade, harbour foreshore, restaurants, shops, Night Markets, Reef Casino and Marlin Marina merely a short stroll away; you are close to everything that makes Cairns a great destination.





Piermonde Apartments

Room Costs (per night) Three Bedroom Apartment - \$385 *GST not applicable*

Distance from conference venue: 4 minute walk Location: 2 – 8 Lake Street, Cairns www.piermondeapartments.com.au

Stay at Piermonde Apartments and explore Cains. At your doorstep you have the best of what Cairns has to offer including shops, restaurants, harbour foreshore, the Esplanade, Night Markets, Marlin Marina and Reef Casino.



Rydges Plaza Cairns

Room Costs (per night) Standard Room - \$164 Deluxe Room - \$184

Distance from conference venue: 6 minute walk Location: 137 The Esplanade, Cairns www.rydges.com/accommodation/cairns-qld/plaza-cairns-hotel

Centrally located in the heart of the city, within easy walking distance to the Reef Casino, Great Barrier Reef departure terminals, Esplanade Lagoon, Foreshore Promenade and Cairns Central shopping complex.

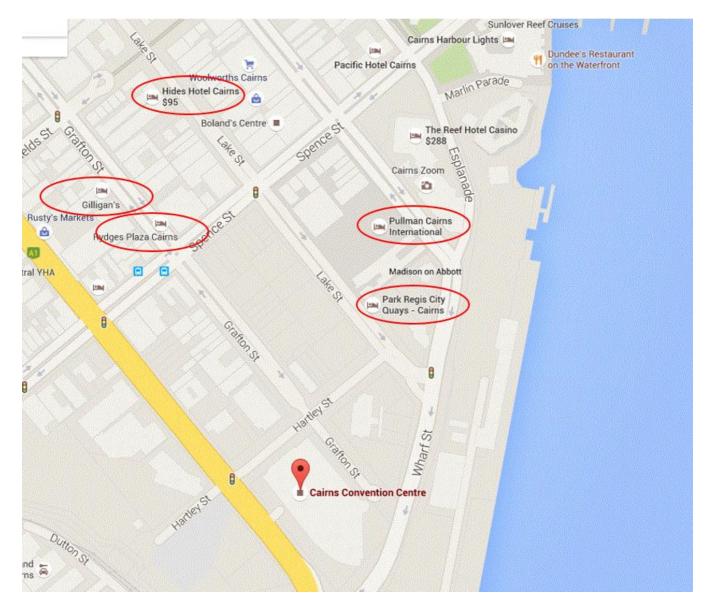


Hides Hotel Cairns

Room Costs (per night) Standard Room - \$115 Superior Room - \$165

Distance from conference venue: 8 minute walk Location: 87 Lake Street Cairns http://www.hideshotel.com.au/

Hides Hotel Cairns offers affordable accommodation right in the heart of Cairns. It is surrounded by restaurants, pubs and shops and is only a short walk to the Casino, Reef Fleet Terminal, Esplanade Lagoon Pool, Cairns Central Shopping Centre and Kuranda Railway Station.



From Google Maps

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Accommodation Terms and Conditions

To receive the special accommodation rates, bookings must be made via Conference Logistics and not with the hotels directly. Please note that accommodation rates offered directly through the hotel or other websites may vary. Online bookings through the conference website are a guaranteed rate and reservation. Accommodation is available for the dates IN: 25/07/2017 - OUT: 1/08/2017, but may be organised outside of these dates on a 'request' basis. If you require accommodation outside of the available dates, please select the dates that the system allows and make a note in the Special Requirements field of the additional dates you require. The closing date for accommodation bookings is 23 June 2017. Bookings made after this date will be subject to availability. All rates are per room, per night and do not include breakfast.

Payment

No booking will be confirmed without a credit card guarantee or a pre-payment. Any incidental expenses incurred during your stay (for example: mini bar, telephone or dry cleaning) must be paid for by yourself on check out.

Accounts

Delegates are responsible for paying the balance of their account and all incidentals on departure from the hotel. The hotel will be responsible for issuing tax invoices for accommodation payments upon departure.

Change of booking

All amendments to your accommodation booking MUST be made in writing to Conference Logistics and NOT directly with the hotel. Any changes must be advised by 23 June 2017.

Cancellation

All cancellations MUST be made in writing to Conference Logistics. Cancellations received after 23 June 2017 will be charged by the hotel according to their cancellation policy.

Check in

Standard hotel check-in time is 2pm, but individual hotels may differ. If you are to arrive before this time it is probable that you will not be able to gain access to your room. To guarantee a room to be available for an early arrival you will need to pre-book your room for the previous night. If required, please indicate on your registration form. (You will be charged by the hotel for the additional night).

SCIENTIFIC PROGRAM

The scientific program will consist of Plenary Lectures (1 hour, including discussion), Progress Reports (30 minutes, including discussion), and Special Reports (15 minutes, including discussion) selected for oral presentation from the contributed abstracts. The contributed posters will be presented in dedicated poster sessions on Wednesday, Thursday, Friday, Monday and Tuesday. Plenary talks are of general interest to all participants; Progress Reports and Special Reports describe recent work in particular subfields and will be arranged in two parallel sessions; Special Reports are short presentations on the most recent advances.

One public lecture will be given by Dr Jamie Seymour on the evening of Wednesday 26 July. The lecture is open to conference participants, accompanying persons and the general public.

Following the successful action initiated in the XXVIII ICPEAC, a set of tutorial lectures will take place on Tuesday 25 July at the conference venue. The lectures will give a pedagogical account of the most recent advances in the field of photonic, electronic and atomic collisions. PhD students and young researchers, registered in ICPEAC, are invited to attend the tutorials without extra fee.

LIST OF INVITED SPEAKERS (TENTATIVE TITLES)

Plenary Lectures

Linda Young Argonne National Laboratory, The University of Chicago, USA Harnessing ultra-intense X-rays for dynamic 3D imaging

Clifford M. Surko

University of California, San Diego, USA New Physics with Advanced Positron Traps and Beams

Henrik Cederquist

Physics Department, Stockholm University, Sweden Heavy particle collisions: from single atomic targets to complex molecular clusters

Tilman Pfau

Physikalisches Institut, Universität Stuttgart, Germany Dipolar quantum gases and liquids

Reinhard Kienberger

Fakultaet fuer Physik, TU Muenchen, Germany Attosecond electron dynamics on surfaces and layered systems

Tutorials

Barry Schneider

National Institute of Standards and Technology, USA 45 Years of Computational Atomic and Molecular Physics: What Have We Learned

Chris H. Greene

Purdue University, USA Theoretical description of atomic and molecular Rydberg states



Max-Planck Institute for Nuclear Physics Heidelberg, Germany Shaping atoms and molecules by strong laser fields

Public Lecture

Dr. Jamie Seymour

James Cook University Australia, the land of things that bite, sting and kill! Is it really that bad?

Progress Reports

Photons

Jens Biegert Spain

Paola Bolognesi Italy

Zenghu Chang

USA

Dimitris Charalambidis Hungary

Marcelo Ciappina Czech Republic

Marcus Dahlström Sweden

Katharina Doblhoff-Dier Netherlands

Jesús Gonzalez-Vazquez Spain

Elena Gryzlova Russia

Kyung Taec Kim Korea

Adam Kirrander UK

Matthias Kling Germany

Christiane Koch Germany

Igor Litvinyuk Australia

Tommaso Mazza Germany

Kiyonobu Nagaya Japan

Laurent Nahon France

Sergei Patchkovskii Germany

Kevin Prince Italy Mid-IR sources for molecular imaging and soft-X-rays

lon and photon induced molecular fragmentation

Attosecond soft x-rays in the water window

Novel high harmonic generation schemes

Attosecond physics gets nano

Precise attosecond pulse characterization

Strong-field fragmentation of small molecules

Ultrafast non-adiabatic dissociation of N2

Poly-chromatic resonant ionization of many-electron atoms

Time-resolved spectroscopy of ultrafast autoionization of He

Ultra-fast X-ray scattering

Attosecond control and tracing of electron dynamics in molecules and nanoparticles

Coherent Control of Bond Making

Strong-field ionisation of Hydrogen

Dichroism and resonances in intense radiation fields

Ultrafast dynamics of nano-scale systems induced by XFEL

Photoelectron circular dichroism in the photoionization of gas phase chiral systems

Probing molecules with photoelectron rescattering and harmonics generation

Coherent control at FELs with attosecond phase resolution

Takeshi Sato Japan

Olga Smirnova Germany

Andre Staudte Canada

Oksana Travnikova France

Hans Jakob Woerner Switzerland

Jian Wu China Multielectron dynamics of atoms and molecules in strong laser fields

Attosecond Spectroscopy

Molecular Imaging with Intense Laser Pulses and Coincidence Spectroscopy

Ultrafast dissociation and molecular decay induced by X-Ray

Attosecond electron dynamics in molecules and liquids

Photon energy deposition in strongfield ionization of molecules

Leptons

David Cassidy Excited states of Positronium in electric fields **Martin Centurion** Ultrafast imaging of isolated molecules with electron pulses USA **Alexander Dorn** Electron impact ionization of clusters Germany and molecules Ilya Fabrikant Positronium collisions with atoms and USA molecules **Gustavo Garcia** Particle transport in biologically relevant Spain media **Zhimin Hu** Dielectronic Recombination in EBIT China **Darryl Jones** Electron scattering from biomolecules Australia Fabris Kossoski Resonant anion states of radiosensitizers Brazil Konstantin Ionization of atoms by massive neutrinos as Kouzakov a probe of neutrino electromagnetic Russia interactions S V K Kumar Low Energy Electron interaction with DNA and Protein India Andrew Murray Unnatural-parity contributions in electron-UK impact ionization of laser-aligned atoms Yasuyuki Shape resonance of the positronium negative Nagashima ion Japan **Michael Natisin** High-resolution Resonant Annihilation USA Simon Preval Physics and applications of collisional UK recombination Yuri Ralchenko Collisional-radiative modeling of hot plasmas LISA Ioan Schneider Reactive collisions of electrons with molecular cations France Małgorzata Low energy electron interaction with Śmiałek molecules of biological interest. Poland Masakazu Molecular Orbital and Atomic Motion Imaging Yamazaki using Time-Resolved Electron Scattering Japan

Heavy Particles, collision with cold matter

Ilkhom Abdurakhmanov Australia

Li Chen-yu France

Johannes Deiglmayr Switzerland

Alicja Domaracka France

Maria Silvia Gravielle Argentina

Niels Kjaergaard New Zealand

Yuri Kozhedub Russia

Maxim Kunitski Germany

Yuri Litvinov Germany

Jennifer Meyer Austria

Takashi Mukaiyama Japan

Oldrich Novotný Germany

Ismanuel Rabadán Spain

Thomas Schlathölter Netherlands

Richard Schmidt USA

Sebastian Will USA

Valery Serbo Russia

Andrew Truscott Australia

Yang Wang Spain

Naoki Watanabe Japan CCC calculations for heavy-particle collisions

Excitation, fragmentation and radiative decay of molecules studied with fast ion beams

Ultracold Rydberg Atoms

Highly charged heavy lons collisions

Fast interactions of atoms and laser pulses with crystal surfaces

Multiple scattering dynamics of cold fermions

Pair creation in low-energy heavy ion-atom collisions

Observation of the Efimov state of the helium trimer

Studies at the border between atomic and nuclear physics

Quantum collisions of cold molecular ions

Collisional properties of ultracold ions with neutral atoms

Internally cold ions in the Cryogenic Storage Ring

Orientation effects in ion-molecule collisions

lons and photons interacting with biomolecules

Many-body physics with ultracold atoms

Quantum Control in Ultracold Dipolar Molecules

Twisted photons, electrons and neutrons as a novel tool in collision physics

Ghost Imaging with Atoms

The relative stability of highly charged fullerenes produced in energetic collisions

H2 ortho-para conversion on amorphous solid water



ABSTRACTS

You will be asked to categorise your abstract into one of the following groups:

- Plenary and tutorial lectures (invited)
- Progress reports (invited)
- Photons
- Leptons
- Heavy particles

Please note that photons, leptons and heavy particles refer to the PROJECTILES in collision processes. Heavy particles also include collisions with cold matter.

Abstracts should be informative, carefully prepared, with an emphasis on new insights. The contributed abstracts for poster presentation (Photons, Leptons and Heavy Particles) should enable the program committee to judge the scientific merit of the presented work. The most interesting and topical abstracts (around 25) will be selected as 15-minute Hot Topic oral presentations.

Deadline for contributed abstracts: Monday 20 February 2017

PREPARATION

The length of each abstract is strictly limited to one page. Abstracts must be prepared using the supplied <u>Word</u> or <u>LaTeX</u> templates. When using the templates, do not make any changes or modifications to the page layout or paragraph styles. Before submission the abstract must be converted into PDF format. It should look like this <u>sample abstract</u>. The file size should not exceed 5 MB. Ideally, keep it small!

Note: The PDF file of abstract should be named as per the following example:

Einstein_A.pdf

In case you submit more than one abstract, a number _1, _2, should be appended:

Bohr_N_1.pdf

Bohr_N_2.pdf

SUBMISSION

When the PDF file of your abstract is ready, proceed to the abstract submission page. To guarantee being considered by the program committee, all contributed abstracts must be submitted before the deadline (Monday 20 February 2017). Please note that any submitted abstract, even if accepted by the program committee, will not be included in the conference program should you fail to register for the conference by Friday 30 June 2017.

Note: At least one of the authors or co-authors must be registered for the conference.

Submit an abstract

ACCEPTANCE AND PUBLICATION

All valid abstracts prepared according to the guidelines will be considered by the program committee. If your abstract has been accepted, you will be notified by e-mail in April 2017. It is intended that only invited papers (plenary and tutorial lectures, progress reports and hot topics) will be published as part of the conference proceedings in the Journal of Physics: Conference Series.

However, if your funding and/or participation at ICPEAC XXX is dependent on a refereed publication, you may nominate your abstract for inclusion to the Conference Proceedings.

POSTERS

Each accepted contribution will be presented in the form of a poster in one of 5 poster sessions, each covering the full range of topics within the conference. The sessions will take place on Wednesday 26 July, Thursday 27 July, Friday 28 July, Monday 31 July and Tuesday 1 August.

Refreshments will be available nearby and there will be informal discussion spaces available in these sessions, which represent the major forum for the presentation of new research and discussions which arise.

Each poster is limited to A0 size (841mm wide by 1189mm high), portrait format. Posters may be presented only if the corresponding abstract has been accepted and if at least one of the authors listed has registered for the conference. A few post-deadline posters might be considered for presentation provided that space is available. Registered posters will be assigned a day for presentation and the board at which it should be displayed.

INVITED PAPERS

Information concerning the submission of the Invited Papers manuscript files (page limits, styles, etc.) will be provided on the conference website and sent by electronic mail to all Invited Speakers by 15 April 2017. All Invited Papers, including the Plenary Talks, Progress Reports and Special Reports, will be published as a regular issue of Journal of Physics: Conference Series, an online open-access journal that is freely available without restriction. Manuscripts should be submitted on the first day of the conference.

ICPEAC XXX LOCAL ORGANISING COMMITTEE

Anatoli Kheifets (Australian National University, Canberra)
Igor Bray (Curtin University, Perth)
Maarten Vos (Australian National University - ANU, Canberra)
Steven Gibson (ANU, Canberra)
Joshua Machacek (ANU, Canberra)
Sean Hodgman (ANU, Canberra)
Dmitry Fursa (Curtin University, Perth)
Alisher Kadyrov (Curtin University, Perth)
Robert Sang (Griffith University, Brisbane)
Christopher Chantler (University of Melbourne)
Feng Wang (Swinburne University, Melbourne)

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Secretary:	Emma Sokell (University College Dublin, Ireland)
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Vice Chair:	Kiyoshi Ueda (Tohoku University, Japan)
Past Chair:	Roberto Rivarola (National University Rosario, Argentina)

ICPEAC XXX EXECUTIVE COMMITTEE

The Executive Committee includes all of the officers and the following members:

Lamri Adoui (GANIL, France) Klaus Bartschat (Drake University, USA) Igor Bray (Curtin University, Australia) Joachim Burgdörfer (Techincal University Vienna, Austria) Anatoli Kheifets (Australian National University) Tom Kirchner (York University, Canada) Fernando Martín (Universidad Autónoma de Madrid, Spain) Anthony Starace (University of Nebraska, USA) Dominique Vernhet (UPMC Paris, France) Li You (Tsinghua University, China)

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The General Committee includes all of the Executive Committee and the following members:

ARGENTINA O. Fojon	DENMARK L. Andersen	ITALY L. Avaldi	SWEDEN E. Lindroth H. Zettergren
AUSTRALIA R. Sang R. White	FRANCE O. Dulieu C. Miron	JAPAN D. Kato K. Okada M. Tashikawa X-M. Tong	SWITZERLAND F. Merkt
AUSTRIA C. Lemell	GERMANY M. Meyer A. Surzhykov M. Vrakking A. Wolf	POLAND M. Pajek	TURKEY O. Sise
BELGIUM X. Urbain	HOLLAND R. Hoekstra	PORTUGAL F. Ferreira Da Silva	UNITED KINGDOM V. Averbukh M. Charlton
BRAZIL M. Varella	HUNGARY P. Dombi	RUSSIA A. Grum-Grzhimailo V. Shabaev	UNITED STAES L. Argenti R. Côté T. Killian U. Thumm
P.R. CHINA D. Ding B. Wei	INDIA C.P. Safvan M. Vinodkumar	SPAIN A. Palacios A. Prosmiti	

SATELLITE MEETINGS

POSMOL 2017

XIX International Workshop on Low Energy Positron and Positronium Physics and XX International Symposium on Electron Molecule Collisions and Swarms

Chairs: James Sullivan (ANU), Ronald White (JCU) and Michael Bromley (UQ) Venue and Location: Amaroo On Mandalay Resort, Magnetic Island, Queensland, Australia Dates: 22-24 July, 2017 Contact: James Sullivan E-mail: <u>posmol2017@gmail.com</u> Web: <u>http://posmol2017.edu.au/</u>

ISIAC 2017

The 25th International Symposium on Ion Atom Collisions

Chair: Alisher Kadyrov (Curtin) Venue and Location: Hotel Grand Chancellor, Palm Cove, Queensland, Australia Dates: 23-25 July 2017 Contact: Alisher Kadyrov Email: <u>A.Kadyrov@curtin.edu.au</u> Web: <u>http://atom.curtin.edu.au/isiac</u>

(E,2E) 2017

International Symposium on (e,2e), Double Photoionization and Related Topics 19th International Symposium on Polarization and Correlation in Electronic and Atomic Collisions Chair: Igor Bray (Curtin) Venue and Location: Hotel Grand Chancellor, Palm Cove, Queensland, Australia Dates: August 2-4, 2017

Contact : Igor Bray Email: <u>I.Bray@curtin.edu.au</u> Web: <u>http://atom.curtin.edu.au/e2epol</u>

ISWAMP - 4

Intense field, Short Wavelength Atomic and Molecular Processes Chairs: Igor Litvinyuk and Robert Sang (Griffith)

Venue and Location: Ship Inn, South Bank, Brisbane, Australia Dates: July 22-24, 2017 Contact: Igor Litvinyuk Email: <u>igor.v.lit@gmail.com</u> Web: <u>http://icpeac30.edu.au/iswamp</u>

RELATED MEETINGS

International Symposium on Atomic Cluster Collisions

Chairs: Jesús Rubayo Soneira & Andrey V. Solov'yov Location: Varadero, Cuba Dates: October 2-6, 2017 Web: www.isacc-cuba.org