Australian National University

ICACS & SHM 2024

24 - 29 Nov, 2024 | Canberra, Australia

DELEGATE INFORMATION & SCHEDULE

Welcome Message

Dear Colleagues and Friends,

It is with great pleasure that we welcome you to the 30th International Conference on Atomic Collisions in Solids (ICACS) and 12th International Symposium on Swift Heavy Ions in Matter (SHIM), held at the Research School of Physics, Australian National University in Canberra, Australia.

Since its inception in 1965 in Aarhus, Denmark, ICACS has been dedicated to exploring the intricate interactions between particle beams and condensed matter. Over the years, ICACS has traversed the globe, fostering comprehensive discussions on phenomena induced by a wide array of projectiles, including singly and multiply charged ions, atoms, clusters, photons, electrons, positrons, and antiprotons. Similarly, the SHIM conference series, which started in 1989 in Caen, France, has united researchers working with high-energy heavy ions across diverse disciplines such as radiation effects in solids, atomic physics, plasma physics, radiation biology, medicine, and nanotechnology. With a focus on both basic and applied research, SHIM has been instrumental in bridging theoretical and experimental approaches within these fields.

In 2018, ICACS and SHIM were held jointly for the first time in Caen, France, marking the beginning of a new era of collaborative learning and mutual enrichment for both communities. This successful amalgamation continued in 2022 at the University of Helsinki, Finland, and now brings us together here for the first time in Australia.

The 2024 conference program promises to be an enriching experience, featuring invited lectures alongside oral and poster presentations in a single-track format. We extend our deepest gratitude to all participants, presenters, and sponsors who have contributed to making this conference possible. Your dedication and enthusiasm are the driving forces behind the ongoing success of the ICACS and SHIM conference series.

We hope this gathering will not only advance our collective understanding but also foster new collaborations and lasting friendships.

Once again, welcome to Canberra. We wish you a productive and inspiring conference.

Sincerely,

Prof. Patrick Kluth
Chair, ICACS & SHIM 2024

Dr. Shankar Dutt
Secretary, ICACS & SHIM 2024

ICACS International Scientific Committee

Last Name	First Name	City (Country)
Djurabekova	Flyura	Helsinki (Finland)
Facsko	Stefan	Dresden (Germany)
Grande	Pedro	Porto Alegre (Brazil)
Karaseov	Platon	St. Petersburg (Russia)
Montanari	Claudia	Buenos Aires (Argentina)
Ogawa	Hidemi	Nara (Japan)
Primetzhofer	Daniel	Uppsala (Sweden)
Riccardi	Pierfrancesco	Cosenza (Italy)
Rothard	Hermann	Caen (France)
Schenkel	Thomas	Berkeley (USA)
Trautmann	Christina	Darmstadt (Germany)
Tsuchida	Hidetsugu	Kyoto (Japan)
Tökési	Károly	Debrecen (Hungary)
Wang	Zhiguang	Lanzhou (China)

SHIM International Scientific Committee

Last Name	First Name	City (Country)
Amekura	Hiro	Tsukuba (Japan)
Apel	Pavel	Dubna (Russia)
Avasthi	Devesh	New Dehli (India)
Beuve	Michael	Lyon (France)
Djurabekova	Flyura	Helsinki (Finland)
Ishikawa	Norito	Ibaraki (Japan)
Kluth	Patrick	Canberra (Australia)
Lang	Maik	Knoxville (USA)
Ma	Xinwen	Lanzhou (China)
Medvedev	Nikita	Prague (Czech Republic)
Monnet	Isabelle	Caen (France)
Papaleo	Ricardo	Porto Alegre (Brazil)
Rothard	Hermann	Caen (France)
Severin	Daniel	Darmstadt (Germany)
Trautmann	Christina	Darmstadt (Germany)

Local Committee

Conference Chair

Patrick Kluth
Research School of Physics
Australian National University

Conference Secretary

Shankar Dutt
Research School of Physics
Australian National University

Committee Members

Jodie Bradby

Robert Elliman

Felipe Kremer

Christian Notthoff

Nahid Afrin

Taleb Alwadi

Jessica Wierbik

Hendrik Heimes

Scope

ICACS

- Charge-exchange processes
- Particle excitation and ionization
- Energy loss, scattering and channelling of primary and secondary particles
- Electron, atom, ion and photon emission processes
- Slow highly-charged-ion interactions at surfaces
- Radiation damage and materials modification, including nuclear-energy materials
- High energy density physics with intense ion beams and in relation to plasma physics
- Collision-induced physical, chemical and biological reactions

SHIM

- Interactions of swift heavy ions with gases, liquids, solids and plasma
- Electronic excitation, charge transfer processes, and local energy deposition
- Conversion of electronic excitation energy into atomic motion, and atomic displacements
- Material modifications, ion track formation and modification
- Creation of point defects and defect clusters, sputtering, mixing and recrystallisation
- Materials response in extreme environments
- Chemical and biological radiation effects
- Swift heavy ion-induced processes in organic and inorganic materials
- Radiobiology and tumour therapy with ion beams
- Heavy-ion micro- and nanotechnology
- Effects of swift heavy ions on electronic devices
- Geological, astrophysical and other applications based on high-energy accelerators
- Dynamics of nuclear reactions and investigation of nuclear structure and dark matter

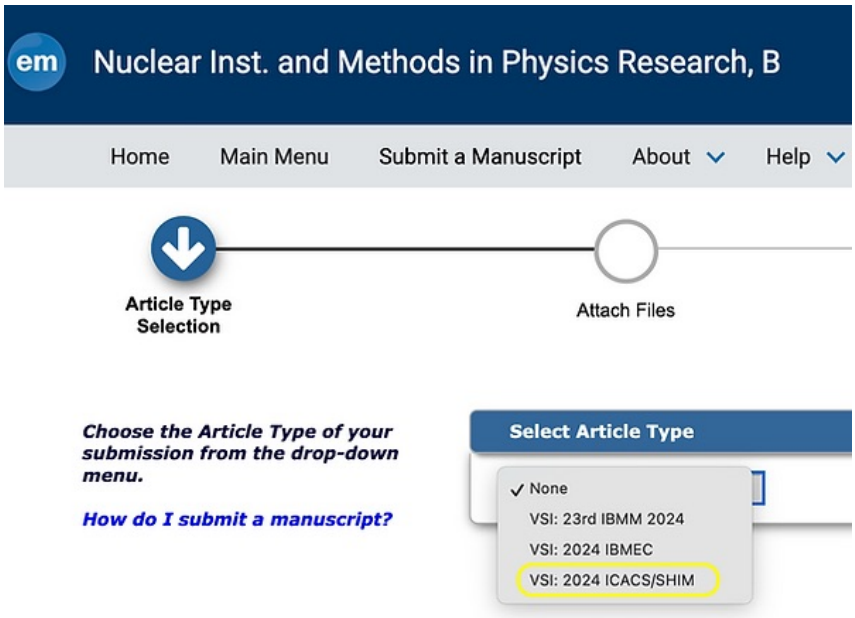
Proceedings

The proceedings of ICACS and SHIM 2024 will be published as a Special Issue in Nuclear Instruments and Methods in Physics Research Section B (NIM B). Manuscripts are submitted to EES through the Special Issue portal and go through a peer review process to the same standard as for regular NIMB articles.

All submitted papers must be clearly written in excellent English and contain only original work, which has not been published by or is currently under review for any other journal or conference. Only manuscripts of contributions presented at the conference will be considered for publication. Invited talks as well as oral and poster contributions will be included in the conference proceedings.

To submit a manuscript of the REI-21 conference proceedings, please, use the link: `https://www.editorialmanager.com/nimb_proceedings/default2.aspx`

After login, choose the Special Issue "VSI: 2024 ICACS/SHIM" from the drop down and then proceed accordingly.



A detailed submission guideline is available as "Guide for Authors" at: `http://www.elsevier.com/locate/issn/0168583X`

Deadline for submission of proceedings is extended to 28 Feb 2025. We strongly encourage you to submit the manuscript!

Code of Conduct

By registering for and attending ICACS-SHIM 2024, you agree to conduct yourself in a professional manner and follow the code of conduct below.

1. **Respect and Inclusivity:** Our conference values the diversity of participants and encourages inclusive dialogue. Discrimination or harassment of any kind, including but not limited to race, religion, age, gender, disability, nationality, or sexual orientation, is strictly prohibited.
2. **Professional Conduct:** All participants should maintain a high level of professionalism throughout the conference. Disruptive or inappropriate behaviour, including offensive language or imagery, is not permitted.
3. **Constructive Dialogue:** We encourage constructive, respectful dialogue and debate. Personal attacks or belittling comments about people's work or ideas are not acceptable.
4. **Intellectual Property:** Respect the intellectual property rights of all participants. Do not use someone else's work without proper credit, and respect confidentiality requests by speakers and attendees.
5. **Privacy:** Do not share private information about other participants without their explicit consent. This includes taking or distributing pictures, videos, or audio recordings.
6. **Reporting Violations:** Participants are encouraged to report any violation of the Code of Conduct to conference organizers. We commit to investigate all reports and take appropriate action.

Failure to comply with this Code of Conduct may result in removal from the conference without refund, and the individual may be barred from future events.

This Code of Conduct is not exhaustive or complete. It serves to set a general standard for participant behaviour. We expect everyone attending the conference to create a safe, positive, inclusive, and welcoming environment.

Conference Schedule

24th November, 2024

16:00 - 18:00 Welcome Reception and Registration

25th November, 2024

08:00 onwards Registration

09:00 - 09:20 **Conference Opening**

Session Chair : Flyura Djurabekova

09:20 - 09:50 **Invited Talk - 1**

Friedrich Aumayr

TU Wien (Vienna University of Technology), Austria

Surface erosion under ion bombardment: Case studies in space weathering and nuclear fusion research

09:50 - 10:10 **Contributed Talk - 1**

Jacques O'Connel

Nelson Mandela University, Port Elizabeth, South Africa

The influence of the near surface environment on hillock formation

10:10 - 10:30 **Contributed Talk - 2**

Hermann Rothard

Centre de Recherche sur les Ions, les Matériaux et la Photonique, Normandie Univ, ENSICAEN, UNICAEN, CEA, CNRS, CIMAP, 14000 CAEN, France

Swift ion irradiation and complex organic molecules in cold space environments

10:30 - 11:00 **Morning Tea**

Session Chair : Rob Elliman

11:00 - 11:30 **Invited Talk - 2**

Raquel Giulian

Federal University of Rio Grande do Sul, Brazil

Antimonide Nanofoams Induced by Ion Irradiation

11:30 - 11:50 **Contributed Talk - 3**

Taleb Alwadi

Australian National University, Canberra, Australia

Ion track formation and porosity in InSb and GaSb after swift heavy ion irradiation

11:50 - 12:10 **Contributed Talk - 4**

Mamour Sall

CIMAP, Caen, France

Towards efficient green light emission by swift heavy ion irradiated-InGaN/GaN multi-quantum wells

12:10 - 12:30 **Contributed Talk - 5**

Lilong Pang

Institute of Modern Physics, Chinese Academy of Sciences, Lanzhou, China

Study on the ion irradiation effect of nano-structural TiAlN coating

12:30 - 13:30 **Lunch**

Session Chair : Hermann Rothard

13:30 - 14:00 **Invited Talk - 3**

Hidetsugu Tsuchida

Quantum Science and Engineering Center, Kyoto University, Japan

Observing the damage to biomolecules induced by ion beams in liquid jets

14:00 - 14:20 **Contributed Talk - 6**

Naruki Uno

Quantum Science and Engineering Center, Kyoto University, Japan

Impact of swift cluster ion irradiation on the process of decomposing nucleotide biomolecules

14:20 - 14:40 **Contributed Talk - 7**

Manoj Kumar

M.M.H. College, Ghaziabad-201001, India

Electron impact scattering studies for C_6H_6

14:40 - 15:00 **Contributed Talk - 8**

Jacob Cook

Binar Space Program, Curtin University, Perth, Australia

Simulated cislunar radiation effects on wide bandgap semiconductor based smallsat power module

15:00 - 15:30 **Afternoon Tea**

Session Chair : Christina Trautmann

15:30 - 16:00 **Invited Talk - 4**

Jie Liu

Institute of Modern Physics, Chinese Academy of Sciences, China

Effects of swift heavy ions on wide band-gap materials and devices

16:00 - 16:20 **Contributed Talk - 9**

Christopher Schroeck

GSI Helmholtz Center for Heavy Ion Research, Darmstadt, Germany

Swift heavy ion irradiation for high-pressure investigations on bismuth nanowire networks

16:20 - 16:40 **Contributed Talk - 10**

Nahid Afrin

Department of Materials Physics, Research School of Physics, Australian National University, Canberra, Australia

Charge-based molecular separation using track-etched silicon dioxide nanopore membranes

16:40 - 17:00 **Contributed Talk - 11**

Mohan Lee

Materials Research Department, GSI Helmholtz Centre for Heavy Ion Research, Darmstadt, Germany

3D gold nanowire networks with tailorable surface wettability engineered through ion-track nanotechnology

26th November, 2024

Session Chair : Hidetsugu Tsuchida

09:00 - 09:30 **Invited Talk - 5**

Tapobrata Som

Institute of Physics, Bhubaneswar, India. Homi Bhabha National Institute, Mumbai, India

Ion induced self-organized pattern formation: Amazing possibilities

09:30 - 09:50 **Contributed Talk - 12**

Pablo Mota Santiago

Australian Synchrotron - ANSTO, Melbourne, Australia. Lund University, Lund, Sweden

3D mapping of nanoscale density fluctuations in swift heavy-ion irradiated materials

09:50 - 10:10 **Contributed Talk - 13**

Jessica Wierbik

Australian National University, Canberra, Australia

The anisotrophy of the ion track cross-section in single-crystalline materials

10:10 - 10:30 **Contributed Talk - 14**

Shyamal Chatterjee

IIT Bhubaneswar, Jatni, India

Ion beam engineering of nanostructures for augmented effects in sensing and energy storage

10:30 - 11:00 **Morning Tea**

Session Chair : Fridrich Aumayr

11:00 - 11:30 **Invited Talk - 6**

Eleni Ntemou

Uppsala University, Sweden

Dynamic processes in ion-matter interaction: electronic excitation and charge exchange below the Bohr velocity

11:30 - 11:50 **Contributed Talk - 15**

Masedi Carington Masekane

Institut Ruđer Bošković, Zagreb, Croatia

X-ray production by heavy ion-atom collision symmetries for Total Ion Beam Analysis

11:50 - 12:10 **Contributed Talk - 16**

Daniel Primetzhofer

Uppsala University, Uppsala, Sweden

Electronic excitations at very low ion energies: experimental challenges

12:10 - 12:30 **Contributed Talk - 17**

Pedro Grande

Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil

Stopping power from Bohmian Mechanics

12:30 - 13:30 **Lunch**

Session Chair : Hiroshi Amekura

13:30 - 14:00 **Invited Talk - 7**

Miguel Sequeira

Institute of Ion Beam Physics and Materials Research, Helmholtz-Zentrum Dresden-Rossendorf, Germany

Exploring Radiation Hardness in Group-III Nitrides: From Fundamentals to Applications

14:00 - 14:20 **Contributed Talk - 18**

Rajdeep Kaur

Department of Physics and Astronomy, Uppsala University, Uppsala, Sweden

Exploring ion beam-induced modifications of the resistive switching in metal oxide films

14:20 - 14:40 **Contributed Talk - 19**

Masanori Koshimizu

Shizuoka University, Hamamatsu, Japan

Thermoluminescence properties of rare-earth-doped $Ca_2B_2O_5$ ceramics after irradiations of heavy charged particles

14:45 - 17:00	**Poster Session & Snacks**
17:00 - 18:00	**International Committee Meeting**
18:00 onwards	**International Committee Dinner**

27th November, 2024

Session Chair : Daniel Primetzhofer

09:00 - 09:30 **Invited Talk - 8**

Louise Goodwin

Center of Research on Ions Materials and Photonics, GANIL, Caen, France

Point defect creation for quantum applications in AlN by SHI irradiation under a finely controlled atmosphere

09:30 - 09:50 **Contributed Talk - 20**

Fshatsion Gessesew

The University of Melbourne, Melbourne, Australia

Exploring phase-transformed V_3Si superconducting material through rutherford backscattering spectrometry analysis

09:50 - 10:10 **Contributed Talk - 21**

Jinglai Duan

Institute of Modern Physics, Chinese Academy of Sciences, Lanzhou, China

Ion track technology-based mechanical metamaterials

10:10 - 10:30 **Contributed Talk - 22**

Diana Merezhko

Institute of Nuclear Physics, Almaty, Kazakhstan

The effect of high and low dose neutron irradiation on mechanical properties and localization of austenitic stainless steels

10:30 - 11:00 **Morning Tea**

Session Chair : Daniel Severin

11:00 - 11:30 **Invited Talk - 9**

Maik Lang

The University of Tennessee, Knoxville, USA

Characterization of radiation effects in ceramics with spallation neutron probes

11:30 - 11:50 **Contributed Talk - 23**

Paramita Patra

Variable Energy Cyclotron Centre, 1/ AF Bidhannagar, 700064, Kolkata, India

A first-principles study of stacking fault energy in Ni-based alloy: role of alloying elements

11:50 - 12:10 **Contributed Talk - 24**

Sergey Kislitsin

Institute of Nuclear Physics of Ministry of Energy of Republic of Kazakhstan, Almaty, Kazakhstan

Proton irradiation temperature impact on the tungsten structure and properties during post-radiation annealing in the temperature range 873K-1273K

12:10 - 12:30 **Contributed Talk - 25**

Norito Ishikawa

Japan Atomic Energy Agency, Tokai, Japan

Complex Nanostructures Originating from Tracks Created Near the Edge of SiO_2 Quartz Irradiated with Swift Heavy Ions

12:30 - 13:45 **Lunch**

14:00 - 19:00 **Conference Outing**

28th November, 2024

Session Chair : Pedro Grande

09:00 - 09:30 **Invited Talk - 10**

Aleksi Leino

University of Helsinki, Finland

Simulating the formation of functional nanostructures in swift heavy ion irradiated materials

09:30 - 09:50 **Contributed Talk - 26**

Kai Nordlund

University of Helsinki, Finland

Beyond the ZBL: using modern quantum chemistry to obtain accurate pair-specific repulsive potentials

09:50 - 10:10 **Contributed Talk - 27**

Ruslan Rymzhanov

Joint Institute for Nuclear Research, Dubna, Russian Federation. The Institute of Nuclear Physics, Almaty, Kazakhstan

Bulk, overlap and surface effects of swift heavy ions in CeO_2

10:10 - 10:30 **Contributed Talk - 28**

Flyura Djurabekova

University of Helsinki, Finland

Phase transitions during ultrafast development of swift heavy ion tracks in amorphous materials

10:30 - 11:00 **Morning Tea**

Session Chair : Jacques O'Connel

11:00 - 11:30 **Invited Talk - 11**

Ana L.F. De Barros

Federal Center for Technological Education Celso Suckow da Fonseca CEFET-RJ, Brazil

Formation of prebiotics in outer space by heavy ion projectiles

11:30 - 11:50 **Contributed Talk - 29**

Md. (Arif) Arifuzzaman

Australian National University, Canberra, Australia

Defect Engineering in 2D Materials for Reduced Contact Resistance

11:50 - 12:10 **Contributed Talk - 30**

Jian Zeng

Institute of Modern Physics, Chinese Academy of Sciences (CAS), Lanzhou, China

Irradiation effects of MoS_2/Graphene heterojunction phototransistors induced by swift heavy ions

12:10 - 12:30 **Contributed Talk - 31**

Shi-Rui Zhang

Australian National University, Canberra, Australia

Synaptic field effect transistor based on charge trapping in ion-implanted gate dielectrics

12:30 - 13:30 **Lunch**

Session Chair : Devesh Kumar Avasthi

13:30 - 14:00 **Invited Talk - 12**

Zuzana Slavkovská

Department of Nuclear Physics and Accelerator Applications, Australian National University, Australia

Radioimpurity measurements for direct dark matter detector studies

14:00 - 14:20 **Contributed Talk - 32**

Pavo Dubcek

Ruđer Bošković Institute, Zagreb, Croatia

Graphene perforation by grazing incidence swift heavy ion irradiation

14:20 - 15:00 **Introduction to:**

HIA Facilities by **Dr. Tom McGoram** and **Dr. Christian Notthoff**

Ion Implantor Labs by **Prof. Rob Elliman**

15:00 - 17:00 **HIA, Ion Implantor Lab and SHRIMP Facility Tour + Afternoon Tea**

18:00 onwards **Conference Dinner**

29th November, 2024

Session Chair : Maik Lang

09:00 - 09:30 **Invited Talk - 13**

Hiroshi Amekura

National Institute for Materials Science, Japan

Ion tracks in diamond

09:30 - 09:50 **Contributed Talk - 33**

Christina Trautmann

GSI Helmholtzzentrum, Darmstadt, Germany

High-pressure platform for swift heavy ion irradiations: probing structural transformations under extreme conditions

09:50 - 10:10 **Contributed Talk - 34**

Guanghua Du

Institute of Modern Physics, CAS, Lanzhou, China

Nanoscale fabrication and application using single gev ions

10:10 - 10:30 **Contributed Talk - 35**

Alexander Azarov

University of Oslo, Centre for Materials Science and Nanotechnology, Oslo, Norway

Dynamic defect annealing in Er implanted $LiNbO_3$

10:30 - 11:00 **Morning Tea**

Session Chair : Raquel Giulian

11:00 - 11:20 **Contributed Talk - 36**

Arno Janse van Vuuren

Nelson Mandela University, Gqeberha, South Africa

The effect of Al-impurity concentrations on the microstructural response of polycrystalline Si_3N_4

11:20 - 11:40 **Contributed Talk - 37**

Yoshiaki Kumagai

Nara Women's University, Nara, Japan

Simulating energy-loss spectrum in thin water sheets using phits code for developing a novel MeV-ion beam experiment setup

11:40 - 12:00 **Contributed Talk - 38**

Djamel Kaoumi

North Carolina State University, Raleigh, USA

Irradiation induced phase transformation in β-Ga_2O_3 through in-situ ion irradiation in a TEM

12:00 - 12:15 **Conference Closing**

Poster Presentations

P1 **Natsuko Fujita**
Japan Atomic Energy Agency, Toki, Japan
Hydrocarbon dissociation efficiency in carbon dioxide samples using an exhaust gas filter

P2 **Fumina Minamitani**
Japan Atomic Energy Agency, Gifu, Japan
Single-year analysis of Tree-ring cellulose by a compact laser ablation system for radiocarbon measurement

P3 **Sayaka Oishi**
Nara Women's University, Nara, Japan
Development of ultra-short-pulse beam injector with the laser-driven acceleration for interactions at surfaces

P4 **Akari Okano**
Nara Women's University, Nara, Japan
Design for the clarification of X-ray emission phenomena from solids by spatio-temporally focused ion beams

P5 **Kai Okazaki**
Nara Institute of Science and Technology, Ikoma, Japan
Effects of linear energy transfer on thermoluminescence properties of Eu-doped CaF2 ceramics

P6 **Kensei Ichiba**
Nara Institute of Science and Technology, Nara, Japan
Thermoluminescence properties of $Y_3Al_5O_{12}$:Ce transparent ceramics at different linear energy transfers

P7 **Mikhail Merezhko**
Institute of Nuclear Physics, Almaty, Kazakhstan
Radiation-induced recrystallization and its role in the formation of corrosion resistance and mechanical properties of ferritic-martensitic steels

P8 **Wentao Wang**
Institute of Modern Physics, Chinese Academy of Sciences, Lanzhou, China.
University of Chinese Academy of Sciences, Beijing, China
Optical properties of nanoholes in low refractive index polymer films

P9 **Satoshi Jinno**
Japan Atomic Energy Agency, Toki, Japan
Development of an ion-funnel reaction cell for suppression of isobaric interference in chlorine-36 measurements

P10 **Hinako Imamura**
Nara Women's University, Nara, Japan
Development of an experimental method for measuring stopping cross-sections in liquid phase using mev-projectile ions

P11 **Yoshiaki Kumagai**
Nara Women's University, Nara, Japan
Simulating energy-loss spectrum in thin water sheets using phits code for developing a novel mev-ion beam experiment setup

P12 **Bing Ye**
Institute of Modern Physics, Chinese Academy of Sciences, Gan Su, China
Characterization of heavy ions produced by protons passing through shielding & packaging and induced seu in nano-devices

P13 **Kunikazu Ishii**
Nara Women's University, Nara, Japan
Classical orbital simulation of rainbow scattering patterns induced by fast ions passing through graphene

P14 **Kanae Saito**
Nara Women's University, Nara, Japan
Survival rate and dissociation phenomena associated with the penetration of diatomic molecular ions through graphene

P15 **Julia Liese**
Ludwig-Maximilians-Universität, München, Germany
Time-resolved optical interferometry of the interaction of heavy ions with water

P16 **Anna-Katharina Schmidt**
LMU-Munich, Munich, Germany
Acoustic measurement of the energy deposition of heavy ions in water at 4˚c

P17 **Ahlam Alharbi**
Flinders University, Adelaide, Australia
Determining the stopping power of low kinetic energy ne+ projectiles in self-assembled monolayers

P18 **Pedro Grande**
UFRGS, Porto Alegre, Brazil
Nanostructures induced by slow highly charged ions on ultrathin PMMA films

P19 **Ryosuke Terasawa**
Meijo Univercity, Nagoya-shi, Japan
Dynamic behaviors of lithium ions at positive electrode/solid electrolyte interfaces under charging conditions with different rates using ion beams analysis

P20 **Shengxia Zhang**
Institute of modern physics, Lanzhou, China
Morphology of latent tracks in the oblique incident TMDCs

P21 **Lijun Xu**
Institute of Modern Physics, Chinese Academy of Sciences, Lanzhou, China
Thermal stability of latent tracks in β-Ga_2O_3 induced by swift heavy ions

P22 **Yasushi Hoshino**
Kanagawa University, Yokohama, Japan
Annealing effect of P-implanted diamond by MeV-ion irradiation

P23 **Haizhou Xue**
Institute of Modern Physics, Chinese Academy of Sciences, Lanzhou, China
Cryogenic electron microscopy study for the latent ion tracks in polyimide induced by swift heavy ion irradiation

P24 **Sergey Kislitsin**
Institute of Nuclear Physics of Ministry of Energy of Republic of Kazakhstan, Almaty, Kazakhstan
Comparative studies of radiation damage of $Cr_{18}Ni_9Ti$ steel irradiated with iron, nickel and krypton ions up to high damage dose

P25 **Mamour Sall**
CIMAP, CAEN, France
Surrogates of type II collagen under irradiation : the influence of the side chain structure on defects creation

P26 **Ayana Tachibana**
Department of Nuclear Engineering, Kyoto University, Kyoto, Japan

Dependence of linear energy transfer on damage to nucleotide molecules

P27 **Ruslan Rymzhanov**
Flerov Laboratory of Nuclear Research, Joint Institute for Nuclear Research, Dubna, Russian Federation
Irradiation temperature effect on stability of SiC irradiated with swift heavy ions

P28 **Tapobrata Som**
Institute of Physics, Bhubaneswar, India. HBNI, Mumbai, India
Artificial nociceptor realized in Au-ion implanted TiOx memristor at nanoscale

P29 **Masedi Carington Masekane**
Institut Ruđer Bošković, Zagreb, Croatia
Research Infrastructure Access in Nanoscience & Nanotechnology

P30 **Pavo Dubček**
Ruđer Bošković Institute, Zagreb, Croatia
Comparison of grazing incidence swift heavy ion track properties formed on CaF_2 and SiO_2

P31 **Leon Kirsch**
GSI Helmholtzzentrum, Darmstadt, Germany
Ultrasonic beam monitoring and energy loss measurements of relativistic heavy ions

P32 **Alexander Azarov**
Peter the Great S.-Petersburg Polytechnic University, St.-Petersburg, Russian Federation
Structure damage accumulation in α-Ga_2O_3 irradiated with P and PF_4 ions

P33 **Jianrong Sun**
Institute of Modern Physics, Chinese Academy of Sciences, Lanzhou, China
Study on the evolution and mechanism of helium bubbles in BCC phase high/medium-entropy alloys

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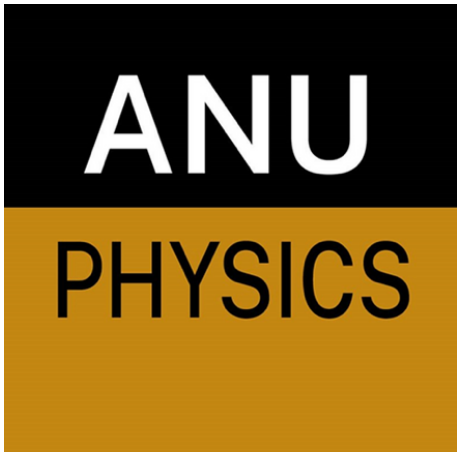

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THE AUSTRALIAN INSTITUTE OF NUCLEAR SCIENCE AND ENGINEERING

Australian National University

ICACS & SHRIM 2024

24 - 29 Nov, 2024 | Canberra, Australia

Schedule

	24th November	25th November	26th November	27th November	28th November	29th November
8:00		Registration (8:00 onwards)				
9:00		Conference Opening (09:00-09:20)	IT-5 (09:00-09:30) Tapobrata Som	IT - 8 (09:00-09:30) Louise Goodwin	IT-10 (09:00-09:30) Aleksi Leino	IT-13 (09:00-09:30) Hiroshi Amekura
09:30		IT-1 (09:20-09:50) Friedrich Aumayr	CT - 12 (09:30-09:50) Pablo Mota Santiago	CT - 20 (09:30-09:50) Fshatsion Gessesew	CT - 26 (09:30-09:50) Kai Nordlund	CT - 33 (09:30-09:50) Christina Trautmann
10:00		CT - 1 (09:50-10:10) Jacques O'Connel	CT - 13 (09:50-10:10) Jessica Wierbik	CT - 21 (9:50-10:10) Jinglai Duan	CT - 27 (09:50-10:10) Ruslan Rymzhanov	CT - 34 (09:50-10:10) Guanghua Du
10:30		CT - 2 (10:10-10:30) Hermann Rothard	CT - 14 (10:10-10:30) Shayamal Chatterjee	CT - 22 (10:10-10:30) Diana Merezhko	CT - 28 (10:10-10:30) Flyura Djurabekova	CT - 35 (10:10-10:30) Alexander Azarov
11:00		Morning Tea 10:30-11:00	Morning Tea 10:30-11:00	Morning Tea 10:30-11:00	Morning Tea 10:30-11:00	Morning Tea 10:30-11:00
11:30		IT-2 (11:00-11:30) Raquel Giulian	IT-6 (11:00-11:30) Eleni Ntemou	IT - 9 (11:00-11:30) Maik Lang	IT - 11 (11:00-11:30) Ana L.F. De Barros	CT - 36 (11:00-11:20) Arno Janse van Vuuren
12:00		CT - 3 (11:30-11:50) Taleb Alwadi	CT - 15 (11:30-11:50) Masedi Masekane	CT - 23 (11:30-11:50) Paramita Patra	CT - 29 (11:30-11:50) Md. (Arif) Arifuzzaman	CT - 37 (11:20-11:40) Yoshiaki Kumagai
12:30		CT - 4 (11:50-12:10) Mamour Sall	CT - 16 (11:50-12:10) Daniel Primetzhofer	CT - 24 (11:50-12:10) Sergey Kislitsin	CT - 30 (11:50-12:10) Jian Zeng	CT - 38 (11:40-12:00) Djamel Kaoumi
13:00		CT- 5 (12:10-12:30) Lilong Pang	CT - 17 (12:10-12:30) Pedro Grande	CT - 25 (12:10-12:30) Norito Ishikawa	CT - 31 (12:10-12:30) Shi-Rui Zhang	Conference Closing 12:00-12:15
13:30		Lunch 12:30-13:30	Lunch 12:30-13:30	Lunch 12:30-13:45	Lunch 12:30-13:30	
14:00		IT - 3 (13:30-14:00) Hidetsugu Tsuchida	IT - 7 (13:30-14:00) Miguel Sequeira		IT - 12 (13:30-14:00) **Zuzana Slavkovská**	
14:30		CT - 6 (14:00-14:20) Naruki Uno	CT - 18 (14:00-14:20) Rajdeep Kaur		CT - 32 (14:00-14:20) Pavo Dubcek	
15:00		CT- 7 (14:20-14:40) Manoj Kumar	CT - 19 (14:20-14:40) Masanori Koshimizu		Introduction to HIA Facilities by Tom McGoram and Christian Notthoff; Ion Implantor Labs by Rob Elliman; SHRIMP Facility by Yue Wang (14:20 - 15:00)	
15:30		CT - 8 (14:40-15:00) Jacob Cook	Poster Session & Snacks 14:45-17:00	Conference Outing 14:00-19:00	HIAF, Ion Implantor Lab and SHRIMP Facility Tour + Afternoon Tea (15:00 - 17:00)	
16:00		Afternoon Tea 15:00-15:30				
16:30		IT - 4 (15:30-16:00) Jie Liu				
17:00	Welcome Reception and Registration 16:00 - 18:00	CT - 9 (16:00-16:20) Christopher Schroeck	International Committee Meeting 17:00-18:00			
17:30		CT - 10 (16:20-16:40) Nahid Afrin				
18:00		CT - 11 (16:40-17:00) Mohan Lee	International Committee Dinner 18:00 onwards		Conference Dinner 18:00 onwards	
18:30						
19:00						
19:30						