Technical Program

Sunday, October 26

A PRIMER SESSION

9:00–9:30 Opening (S. Dabagov, L. Palumbo, M. Calvetti, C. Guaraldo)

9:35–10:15 **A. Zichichi** (*to be announced*) /invited/

Coffee break (20 min)

10:45–11:15 **G. Barbiellini**
Channeling in Frascati INFN /invited/

11:20–11:50 **N. Shul'ga**
Advances in Coherent Bremsstrahlung and LPM-effect Studies (in commemoration of the 100th anniversary from the birth of L.D. Landau) /invited/

11:55–12:25 **A. Potylitsyn**
Monochromatic X-ray Sources Based on Table-Top Electron Accelerators and X-ray Tubes /invited/

Lunch (1h 30min)

14:00–14:30 **R. Ruth**, J. Rifkin, and R. Loewen
The Compact Light Source: A Miniature Synchrotron /invited/

14:35–15:05 **J. Faure**
Laser-Plasma Based Electron Accelerators /invited/

15:10–15:40 **V. Rozanov**
The Radiation Yield in Different Spectral Ranges from Low Density Structured Laser Plasma with Different High Z-Admixture /invited/

Coffee break (20 min)

16:05–16:35 **S. Fomin**, Y. Mel'nik, V. Pilipenko, and N. Shul'ga
Challenge Safe Fast Reactor Working in a Nuclear Burning Wave Regime /invited/

16:40–17:10 **S. Connell**
Physics of Diamond and Applications /invited/

17:15–17:45 **L. Serafini**
Compton Sources: Physics and Applications, Following SPARC & PLASMONX Projects /invited/

22:00 ***Welcome Party***

Monday, October 27

Session: ***S3.1 – Novel Sources: PXR & TR & DR & FEL & Plasma***
Chair: ***H. Backe***

9:00–9:30 **X. Artru**, G. Naumenko, A. Potylitsyn, Yu. Popov, and L. Sukhikh,
Shadowing of the Electromagnetic Self-Field of a Relativistic Electron /invited/

9:35–9:50 **E. Bessonov**
Methods of Charged Particle Beam Cooling

9:55–10:10 **M. Ryazanov**, M. Strikhanov, and A. Tishchenko
Backward Transition Radiation at Grazing Incidence on Rough Metal Surface as a Source of THz Radiation

10:15–10:30 **N. Shul'ga**, V. Syshchenko, and S. Shul'ga
Equivalent Photon Method and Eikonal Approximation in the Theory of Transition Radiation

Coffee break (20 min)

Session: ***S3.2 – Novel Sources: PXR & TR & DR & FEL & Plasma***
Chair: ***F. Komarov***

10:55–11:25 **R. Avakian**
PXR and DTR Radiations of 4.5 GeV Electrons in Diamond and Quartz Crystals /invited/

11:30–11:45 **M. Castellano**, E. Chiadroni, and A. Cianchi
Diffraction Radiation as a Diagnostics Tool at FLASH

11:50–12:05 **A. Lobko**
Compact PXR Sources: Achievable Parameters and Possible Applications

12:10–12:25 **K. Ispirian**, A. Gogolev, and A. Potylitsyn
Ray Tracing Calculation of PXR Produced in Curved and Flat Crystals by Electron Beams with Large Emittance

Lunch (1h 30min)

Session: ***S1.1 – Coherent Bremsstrahlung***
Chair: ***A. Potylitsyn***

14:00–14:30 **N. Baier**, and V. Katkov
Spectra of Radiation and Created Particles at Intermediate Energy in Oriented Single Crystal /invited/

14:35–15:05 **U. Uggerhoj** (representing CERN NA63)
Trident Production Observed in Aligned Crystals /invited/

15:10–15:25 **S. Fomin,** A. Fomin, and N. Shul'ga
Bremsstrahlung in a Thin Layer of Matter at High Energy

15:30–15:45 **Alper Dizdar** (CERN NA63)
Radiation from Thin Structured Targets

Coffee break (20 min)

Session: ***S1.2 – Coherent Bremsstrahlung***
Chair: ***D. Giulietti***

16:10–16:25 **A. Mktrtchyan**, and V. Parazian
The Induction of Coherent X-Ray Bremsstrahlung in Crystals Under the Influence of Acoustic Waves

16:30–16:45 **V. Ganenko**, K. Fissum, J. Brudvik, D. Burdeinyi, K. Hansen, L. Isaksson, K. Livingston, M. Lundin, V. Morokhovskyi, B. Nilsson, B. Schröder, and G. Vashchenko
The Coherent Bremsstrahlung Beam at MAX-lab Facility

16:50–17:05 **V. Maisheev**
Coherent Processes in Bent Single Crystals

17:10–17:25 **D. Karlovets**
On a Dual Symmetry in Some Boundary-Value Problems of Classical Electrodynamics

17:30–17:45 **I. Vnukov**, D. Baklanov, N. Maslov, A. Mazilov, R. Shatokhin, and Yu.Zhandarmov
Tunable X-ray Source Based on Mosaic Crystals Using for Medical Applications

18:05-19:00 ***Poster Session 1*** Chair: ***L. Quintieri***

PS1-1. Spectra of Radiation of Relativistic Electrons at Axial Channeling in the Crystals, **A.A. Ananeva**, O.V. Bogdanov, K.B. Korotchenko, and Yu.L.Pivovarov

PS1-2. Calculations of Channeling Radiation Spectra from Relativistic Electrons and Positrons in a Thin Si Crystal **O.V. Bogdanov**, and Yu.L. Pivovarov

PS1-3. Channeling Radiation from Relativistic Electrons in a Crystal Target: New Kind of Combinational X-Ray Radiation Emitted at Bragg's Angle K.B. Korotchenko, Yu.L. Pivovarov, T.A. Tukhfatullin, and **E.I. Fiks**

PS1-4. Radiation Spectra of Two Hundred MeV Electrons in Diamond and Silicon Crystals at Axial and Planar Orientations K. Fissum, J. Brudvik, D. Burdeinyi, **V. Ganenko**, K. Hansen, L. Isaksson, K. Livingston, M. Lundin, V. Morokhovskyi, B. Nilsson, B. Schröder, and G. Vashchenko

PS1-5. Enhancement of Radiated Photons Number and Energy by the Planar Channeled and Quasi-channeled Electrons in Complex Crystals **L.Gevorgian**

PS1-6. Formation of Relativistic Positron Systems and Their Decay to Gamma-rays by the Axial Channelling of Positrons in Ionic Crystals **A.S.Gevorkyan**, and A.R. Mkrtchyan

PS1-7. Quantum Uncertainties in the Energy of Transverse Oscillations of Planar Channeled Particle **L. Grigoryan**, W. Wagner, H. Khachatryan, and B. Azadegan

PS1-8. Calculation of the Photon Spectrum Radiated by a Planarly Channeled Positron Bunch with Allowance for the Medium Polarization **L.A.Hovsepyan**

PS1-9. On the Connection Between Diffraction Radiation and Transition Radiation **D. Karlovets**, and A. Potylitsyn

PS1-10. The Role of the Structure Imperfectness in Formation of the Emission Spectrum from a Crystalline Undulator A. Kostyuk, **A.V. Korol**, A.V.Solov'yov, and W. Greiner

PS1-11. Theory of New Combinational X-Radiation of Electrons under Axial Channeling in Crystals **K.B. Korotchenko**

PS1-12. Measurement of Grain Size by Means of Polarization Bremsstrahlung from Relativistic Electrons Moving in Small-Grained Media P.N.Zhukova, **A.S. Kubankin**, N.N. Nasonov, and V.I. Sergienko

PS1-13. Coherent e^+-e^- Pair Photoproduction In Crystal In A Channeled States **Yu.P. Kunashenko**

PS1-14. The General Theory of Bremsstrahlung by High Energy Electrons in Periodically Deformed (by Acoustic Wave) Single Crystal **V.Parazian**, A. Mktrtchyan, and A. Saharian

PS1-15. Positron Channeling Experiments at the DAFNE BTF Facility: the CUP Experiment B.Buonomo, S.B. Dabagov, G. Mazzitelli, and **L. Quintieri**

PS1-16. Ion-Luminescence in the CdS Type Crystals of Low- Energy Ions Channeling **A.Rasulov**, A. Abdukadirov, and M. Khaydarov

PS1-17. On Coherent and Transition Radiation by Relativistic Electrons in the Field of Periodically Deformed Crystal Planes of Atoms **N.F. Shul'ga**, and V.V. Boyko

PS1-18. On Possibility of Classically Radiationless Motions of Relativistic Charge Distributions in Periodical Structures **N.F. Shul'ga**

PS1-19. Hard Incoherent Radiation in Thick Crystals N.F. Shul'ga, **V.V.Syshchenko**, and A.I. Tarnovsky

PS1-20. On Some Details of Radiation of Fast Particles on Fibers **V.V.Syshchenko**, and N.V. Soboleva

PS1-21. Polarization Of Coherent Type B Bremstrahlung **S.S. Tsirkin**, and Yu.P. Kunashenko

PS1-22. Planar Channeling of Electrons in Si and LiF Crystals: New Kind of Combinational X-Ray Radiation Emitted at Bragg's Angle O.V. Bogdanov, K.B. Korotchenko, Yu.L. Pivovarov, and **T.A. Tukhfatullin**

PS1-23. Channelling Radiation from Relativistic Electrons in a Crystal Target as Complementary X-Ray and Gamma Ray Source at Synchrotron Light Facilities K.B. Korotchenko, Yu.L. Pivovarov, and **T.A. Tukhfatullin**

PS1-24. The Proposal of the Experiment on the Research of the Diffracted Channeling Radiation D.A. Baklanov, A.N. Ermakov, V.K. Grishin, R.A.Shatokhin, **I.E. Vnukov**, and Yu.V. Zhandarmov

PS1-25. The Formation and Usage of Coherent Correlated Charged Particles States in the Physics of Channeling in Crystals **V.I.Vysotskii**, S.V.Adamenko, and M.V.Vysotskyy

PS1-26. Unknown Anomalous of Doppler Effect at Extreme Cherenkov Condition During Relativistic Channeling in Perfect Crystals **M.V. Vysotskyy**, and V.I. Vysotskii

PS1-27. Diagnostics of Mosaic Crystals by the Scattering of Synchrotron Radiation **P.N. Zhukova**

PS1-28. An Intense Channeling Radiation X-ray Source **W. Wagner**, B.Azadegan, M. Sobiella, J. Steiner, K. Zeil, and J. Pawelke

Tuesday, October 28

Session: ***S3.3 – Novel Sources: PXR & TR & DR & FEL & Plasma***
Chair: ***A. Pathak***

9:00–9:30 **V. Baryshevsky**
Volume Free Electron Lasers /invited/

9:35–9:50 **Kh. Chouffani**
Laser-Compton Scattering from Intermediate Energy Electron Beams

9:55–10:10 **Y. Adischev**, K. Artemov, K. Afanasiev, V. Bespalov, A. Gogolev, A. Vukolov, I. Kurkan, S. Polevin, A. Potylitsyn, V. Ryzhov, and I.Tropin
The Powerful Nanosecond Duration Electron Beam Effect on the Crystalline Tungsten Target

10:15–10:30 **A. Cianchi** (on behalf of SPARC team)
The Status of the SPARC Project

Coffee break (20 min)

Session: ***S4.1 – Channeling & Crystal Collimation***
Chair: ***W. Scandale***

10:55–11:25 **R. Carrigan, Jr.**
Muon Channeling and the Need to Investigate Negative Particle Channeling and Collimation /invited/

11:30–11:45 **V. Tikhomirov**, V. Guidi, and A. Mazzolari
New Possibilities to Facilitate Collimation of Both Positively and Negatively Charged Particle Beams by Crystals

11:50–12:05 **S. Hasan**
CRYM: a Crystal Channeling Emulation Code Based on the Latest Experimental Data

12:10–12:25 **N. Gordillo**, R. González-Arrabal, and D. Martín y Marero
A Study of the Coulomb Explosion of High Energy Ions by Comparing Computing Simulations and Experiments

Lunch (1h 30min)

Session: ***S4.2 – Channeling & Crystal Collimation***
Chair: ***U. Uggerhøj***

14:00–14:30 **W. Scandale**
Bent Crystals in the LHC: A Way to Improve the Collimation Efficiency in Modern Hadron Colliders /invited/

14:35–15:05 **V. Guidi**, S. Baricordi, P. Dalpiaz, M. Fiorini, and A. Mazzolari
Observation of High-Efficiency Axial Channeling of High-Energy Protons in a Bent Crystals /invited/

15:10–15:25 **Y. Kunashenko**, and Y. Pivovarov
Creation of Relativistic Positronium Atom by Relativistic Axially Channeled Electron

15:30–15:45 **A. Redondo-Cubero**, K. Lorenz, N. Franco, S. Fernández-Garrido, R. Gago, E.Muñoz, and E. Alves
Influence of Steering Effects on Ion Channeling Determination of Strain in GaN-based Heterostructures

Coffee break (20 min)

Session: ***S4.3 – Channeling & Crystal Collimation***
Chair: ***V. Guidi***

16:10–16:25 **E. Tsyganov**
Thermal Equilibrium of Light Ions in Heavy Crystals

16:30–16:45 **M. Vysotskyy**, and V. Vysotskii
Parametric Channeling and Collapse of Beams of Charged Particles in Crystals

16:50–17:05 **Juby George**, and A. Pathak
Dechanneling of Positrons by Dislocations: Effects of Anharmonic Interactions

17:10–17:25 **G. Tolstolutskaya**
Analysis of Lattice Distortion by Dechanneling

17:30–17:45 **V. Zvorykin**, A. Ionin, S. Kudryashov, A. Levchenko, A. Molchanov, L. Seleznev, D. Sinitsyn, and N. Ustinovskii
Plasma Channels in Air Produced by UV Laser Beam: Mechanisms of Photoionization and Possible Applications

18:00-19:00 ***Poster Session 2*** Chair: ***D. Hampai***

PS2-1. The Possibility of Acceleration of the Charged Particles in Low Temperature Acoustoplasma **A.S. Abrahamyan**, A.R. Mkrtchyan, and R.B. Kostanyan

PS2-2. Computer Simulations of Experiments on Resonant Coherent Excitation of Ar17+ Ions under Planar Channelling **A.A. Babaev**, and Y.L.Pivovarov

PS2-3. Optimization of Relativistic Electron Diffracted Transition Radiation Yield **S.V. Blazhevich**, and A.V. Noskov

PS2-4. New Experimental Results with Optical Diffraction Radiation Diagnostics **E. Chiadroni**, M. Castellano, A. Cianchi, K. Honkavaara, and G. Kube

PS2-5. Observation of Dynamical Maxima of Parametric X-Ray Radiation For 20 MeV Electron Energy Beam **G.K. Khachaturyan**, A.R. Mkrtchyan, and A.H. Mkrtchyan

PS2-6. Peculiarities in Extreme Ultraviolet Transition Radiation **A.S.Kubankin**

PS2-7. Coherent Creation of Antihydrogen Atoms in a Crystal **Y.P.Kunashenko**

PS2-8. Soft X-Ray Channeling in Policapillary Structures at the Condition of Anomalous Dispersion Region of SiL−Edge Absorption **M. Mazuritskiy**, S. Dabagov, and P. Makhno

PS2-9. Fabrication of Crystals for Channeling of Particles in Accelerator **A.Mazzolari**, S.Baricordi, V. Guidi, G. Martinelli, D. Vincenzi, and M.Ferroni

PS2-10. Transition Radiation of Relativistic Electrons on Acoustic Superlattice in Amorphous Media **A. Mktrtchyan**, V. Kocharyan, Z. Amirkhanyan, G.Khachaturyan, and A. Movsisyan

PS2-11. Slowing Down of Relativistic Heavy Ions in Radiator: Influence on Angular Distribution and Total Yield of Cherenkov Radiation V.R.Altapova, O.V. Bogdanov, and **Yu.L. Pivovarov**

PS2-12. Resonant Coherent Excitation of Relativistic Hydrogen-like Uranium Ions in a Silicon Crystal at FAIR: a Computer Simulation A. Babaev, K.Klimova, and **Y. Pivovarov**

PS2-13. The Comparison of Monochromatic X-ray Sources Based on X-ray Tube and 5 MeV Microtron A.S. Gogolev, S.I.Kuznetsov, **A.P. Potylitsyn**, Yu.A. Popov, S.R.Uglov, A.V. Vukolov, A.R. Wagner, V.N. Zabaev, and I.V. Zaitsev

PS2-14. Structural Investigations of ZnO Thin Films Grown by Reactive Pulsed Magnetron Sputtering at Different Substrate Temperatures **A.Redondo-Cubero**, M. Vinnichenko, M. Krause, and R. Gago

PS2-15. Synchrotron Radiation from a Charge Moving Along Helical Orbit Around a Dielectric Cylinder **A.A. Saharian**, A.S. Kotanjyan

PS2-16. Coherent Pair Production in Crystals in Presence of Acoustic Waves A.R. Mkrtchyan, **A.A. Saharian**, and V.V. Parazian

PS2-17. The La, Pb, Sn Contained Micro- and Nanocrystals Incorporated into AX (A= Cs, K, Na, Rb; X=Cl, Br, I) Matrixes as Materials for X-ray Detectors A.S. Voloshinovskii, **P.V. Savchyn**, G.B. Stryganyuk, S.V. Myagkota, V.V. Vistovskyy, O.T. Antonyak, Z.A. Khapko, and I.D. Karbovnyk

PS2-18. Hard Photons Powerful Radiation of Electron Bunch Interacting with Plasma Beat Waves **A.Shamamian**, and L. Gevorgian High Spectral Density of Focused Parametric X-ray Radiation **A.V.Shchagin**

PS2-19. Spectra of Electrons and Ions in Pyroelectric Accelerator V.I.Nagaychenko, and **A.V. Shchagin**

PS2-20. LABSYNC: A Project to Develop a European Facility Based on a Table-top Synchrotron Light Source G. Di Domenico, A. Franconieri, M.Gambaccini, M. Marziani, **A. Taibi**, A. Tartari, and J.P. Locquet

PS2-21. Increase of Probability of Particle Capture into the Channeling Regime by the Buried Oxide Layer V. Guidi, A. Mazzolari, and **V.V.Tikhomirov**

PS2-22. Smith-Purcell Radiation from an Ideal-Conducting Grating Disposed on a Dielectric Layer **A.A. Tishchenko**, D.V. Karlovets, A.P. Potylitsyn, and M.N. Strikhanov

Wednesday, October 29

Session: ***S3.4 – Novel Sources: PXR & TR & DR & FEL & Plasma***
S5.1 – X-Ray Channeling & X-Ray Optics & Applications

Chair: ***K. Chouffani***

9:00–9:30 **I. Endo**, M. Tanaka, and T. Yoshimura
Introduction of Small Accelerators in Student Laboratory for Engineering Education /invited/

9:35–10:05 **J. Fernandez**, V. Scot, D. Sivieri, and A. Guidetti
Selective Amplification of X-rays in the Energy Range 30–70 keV /invited/

10:10–10:40 **P. Wobrauschek**, and C. Streli
X-ray Fluorescence Analysis with Ultimate Sources, Optics and Detectors – Applications and Results /invited/

10:45–11:15 **K. Tsuji**, M. Yamaguchi, and T. Yonehara
Feasibility of X-ray Energy Filtering by Using Polycapillary X-ray Optics /invited/

Excursion

Thursday, October 30

Session: ***S5.2 – X-Ray Channeling & X-Ray Optics & Applications***
Chair: ***P. Childs***

9:00–9:30 **F.F. Komarov**, and A.S. Kamyshan
Time And Angular Distributions Of Ions Transmitted Through Insulating Capillaries /invited/

9:35–9:50 **S. Pogossian**
Neutron Number Enhancement in Uranium Thin Film Waveguides

9:55–10:10 **Y. Pivovarov**, A. Babaev, K. Korotchenko, Y. Kunashenko, and T. Tukhfatullin
Schwinger Scattering of Neutron Beam in Aligned Crystal and by Crystal Surface

10:15–10:30 **D. Hampai**, S. Dabagov, G. Cappuccio, A. Longoni, T. Frizzi, G.Cibin, V. Guglielmotti, M. Sala, and V. Sessa
X-ray Microfocusing by Polycapillary Optics

Coffee break (20 min)

Session: ***S2.1 – Channeling Radiation & Related Phenomena***
Chair: ***X. Artru***

10:55–11:25 **H. Backe**, W. Lauth, P. Kunz, and U.I. Uggerhøj
Advances in Electron and Positron Channeling Studies /invited/

11:30–11:45 **W. Lauth**, H. Backe, P. Kunz, and U.I. Uggerhøj
Channeling Experiments with Electrons at the Mainz Microtron MAMI

11:50–12:05 **R. Chehab**, X. Artru, M. Chevallier, T. Kamitani, T. Omori, L. Rinolfi, V. Strakhovenko, T. Suwada, A. Variola, and A.Vivoli
A Positron Source Using Channeling in Crystals for Linear Colliders

12:10–12:25 **L. Gevorgyan**
Intense Quasi-Monochromatic Directed X-Ray Radiation of Planar Channeled Positron Bunch

Lunch (1h 30min)

Session:	***S3.5 – Novel Sources: PXR & TR & DR & FEL & Plasma***
Chair:	***I. Endo***
14:00–14:30	**H. Nitta** *Diffracted Channeling Radiation and Other Compound Radiation Processes* /invited/
14:35–15:05	**L. Gizzi**, et al. *Laser-Plasma Acceleration: First Experimental Results from the PLASMONX Project* /invited/
15:10–15:25	**D. Giulietti** (on behalf of PLASMON-X team) *The Status of the PLASMONX Project*
15:30–15:45	**X. Artru**, and C. Ray *Acceleration and Radiation in a Helical Cavity*
	Coffee break (20 min)
Session:	***S3.6 – Novel Sources: PXR & TR & DR & FEL & Plasma***
Chair:	***L. Serafini***
16:10–16:25	**Y. Hayakawa**, K. Hayakawa, M. Inagaki, T. Kuwada, K. Nakao, K. Nogami, T.Sakai, I. Sato, Y. Takahashi, and T. Tanaka *Geometrical Effect of Target Crystal on PXR Generation as a Coherent X-ray Source*
16:30–16:45	**V. Malyshevsky** *Effect of Heavy Ion Charge Fluctuations on Cherenkov Radiation*
16:50–17:05	**G. Mazzitelli**, B. Buonomo, F. Murtas, L. Quintieri, and P. Valente *The Dafne Beam Test Facility*
17:10–17:25	**A.A. Tishchenko**, M.I. Ryazanov, and M.N. Strikhanov *X-Ray Transition Radiation at Grazing Incidence from Uneven Surfaces*
17:30–17:45	**G. Naumenko**, A. Potylitsyn, L. Sukhikh, and Y. Popov *Experimental Investigation of Smith-Purcell Radiation Focusing by Using the Parabolic Periodical Targets*
20:00	***Social Dinner***

Friday, October 31

Session: ***S5.3 – X-Ray Channeling & X-Ray Optics & Applications***
Chair: ***W. Wagner***

9:00–9:30 **P. Childs**, S. Ong, D. Herbert, and A. O'Neill
X-ray Propagation in Multiwalled Carbon Nanotubes /invited/

9:35–9:50 **A. Ciorba**, V. Guglielmotti, S. Orlanducci, V. Sessa, F.Toschi, M.Terranova, M. Lucci, F. Odorici, L. Malferrari, R. Angelucci, R. Rizzoli, G. Veronese, M. Rossi, and D. Hampai
Electron Sources Based on the Field Emission Properties of Carbon Nanotube Systems Organized at the Micro- and Mesoscopic Scale

9:55–10:10 **V. Vysotskii**, and S. Adamenko
Surface Channeling of Magnetic-Charged Particles on Multilayer Surface: Part-I

10:15–10:30 **V. Vysotskii**, and S. Adamenko
Surface Channeling of Magnetic-Charged Particles on Multilayer Surface: Part-II

Coffee break (20 min)

Session: ***S2.2 – Channeling Radiation & Related Phenomena***
Chair: ***H. Nitta***

10:55–11:25 **W. Wagner**, B. Azadegan, H. Büttig, L. Grigoryan, M.Sobiella, and J. Pawelke
Probing Channeling Radiation Influenced by Ultrasound /invited/

11:30–11:45 **B. Azadegan**, L. Grigoryan, and W. Wagner
Treatment of Planar Channeling Radiation under the Influence of Ultrasound

11:50–12:05 **S.V. Blazhevich**, and A.V. Noskov
On Dynamic Effects in Coherent X-radiation of Relativistic Electron in Bragg Scattering Geometry

12:10–12:25 **D. Lietti**, D. Bolognini, P. Dalpiaz, M. Fiorini, V. Guidi, S. Hasan, A.Mazzolari, R. Milan, M. Prest, E. Vallazza, and A. Vomiero
Study of the Radiation Emitted by Low Energy Electrons and Positrons in Bent Crystals

Lunch (1h 30min)

Session: ***S2.3 – Channeling Radiation & Related Phenomena***
Chair: ***G. Mazzitelli***

14:00–14:30 **A. Solov'yov**, A. Korol, A. Kostyuk, and W. Greiner
Crystalline Undulator: Theoretical Advances /invited/

14:35–15:05 **A. Pathak**, J. George, and A. Solov'yov
Effects of Dislocations on Positron Channeling in a Periodically Bent Crystal /invited/

15:10–15:25 **A. Korol**, A. Kostyuk, A. Soov'yov, and W. Greiner
On the Feasibility of an Electron-Based Crystalline Undulator

15:30–15:45 **A. Kostyuk**, A. Korol, A. Solov'yov, and W. Greiner
Radiation from a Modulated Positron Beam in the Crystalline Undulator

Coffee break (20 min)

16:10–16:30 **Closing**