

Technical Program
Plasma Physics-Theory and Applications (PP)
International School on Physics and Allied Disciplines (ISPAD) - 2021 (March 9-11, 2021)*
National Centre for Physics, Islamabad

Tuesday March 9	Wednesday March 10	Thursday March 11
09:30 – 09:45** Opening Session	Hantao Ji (PPPL) (Plenary Talk PP) 09:00 – 09:45	Kyunghwan Oh (Plenary Talk RMI) 09:30 – 10:00
Ioannis Kourakis (Khalifa U) (Plenary Talk PP) 09:45 -10:30	Atsushi Fukuyama 09:45 – 10:15	Ioannis Kourakis (Khalifa U) 10:00 – 10:30
Wang Tieshan (Plenary Talk RMI***) 10:30 – 11:00	Hassan A. Shah 10:15 – 10:45	M. Nouman Qureshi 10:30 – 11:00
Tea/Coffee Break and Discussion (1100 – 1130)		
Luca Volpe (CLPU) 11:30 – 12:00	Waqas Masood 11:30 – 12:00	Muhammad Zakauallah 11:30 – 12:00
Aman ur Rehman 12:00 – 12:30	Abdur Rasheed 12:00 – 12:20	Nadia Jamil 12:00 – 12:20
Shahid Ali 12:30 – 12:50	Haider Rizvi 12:20 – 12:40	Saba M. Gondal 12:20 – 12:40
Zafar Iqbal 12:50 – 13:10	Muhammad Shahid 12:40 – 13:00	Usman Hassan 12:40 – 13:00
Lunch Break (1300 – 1400)		Lunch Break (1300 - 1330)
Natko Skukan (Plenary Talk RMI) 13:30 – 14:00		
Michael Bonitz (ITAP) (Plenary Talk PP) 14:00 – 14:45	Dimitri Batani (CELIA) (Plenary Talk PP) 1400 - 1445	John M. Dudley (Plenary Talk RMI) 14:00 – 14:30
J. Tito Mendonca (IPFN) (Plenary Talk PP) 14:45 – 15:30	Tobias Dornheim (HZDR) 14:45 – 15:15	V. Palleschi (Plenary Talk RMI) 14:30 – 15:00
Bengt Eliasson (U Strathclyde) 15:30 – 16:00	Zhandos Moldabekov (HZDR) 15:15 – 15:45	Sorokin Michael (Plenary Talk RMI) 15:00 – 15:30
Umer Rehman 16:00 – 16:20	Gohr Abbas 15:45 – 16:15	Closing 15:30 – 15:45
Muhammad Shahid 16:20 – 16:40	Muhammad Jamil Alvi 16:15 – 16:35	
Ata Ur Rehman 16:40 – 17:00	Muhammad Irfan 16:35 – 16:55	
Gul-e-Ali 17:00 -17:20	Poster Session 16:55 – 18:00	

* Virtual (On Zoom)

** All times are in Pakistan Local Time

***RMI (Radiation-Matter Interaction)

Plasma Physics-Theory and Applications (ISPAD-2021 NCP)(Plenary and invited talks on Zoom)

Speaker	Laboratory/Institute	Title
Hantao Ji (Plenary)	Princeton Univ. and PPPL, USA	Frontiers of magnetic reconnection research
Michael Bonitz (Plenary)	ITAP, Kiel Univ., Germany	Warm dense matter and activities in theory and simulations
Jose Tito Mendonca (Plenary)	IPFN, Lisbon Univ., Portugal	Twisted Light: Topological effects in plasma and optics
Dimitri Batani (Plenary)	CELIA, Bordeaux Univ. France	Advancements in Inertial Confinement Fusion (ICF) and future perspectives
Ioannis Kourakis (Plenary)	Khalifa Univ., UAE	Nonlinear Science: from Tsunami Waves to Optical Pulses and Plasmas
Atsushi Fukuyama	Kyoto Univ., Japan	Kinetic full wave analysis in inhomogeneous plasmas
Luca Volpe	CLPU, Spain	High power lasers for studying Proton stopping power in extreme state of matter
Ioannis Kourakis	Khalifa Univ., UAE	Common pitfalls and errors in nonlinear plasma wave modelling
Bengt Eliasson	Strathclyde Univ., UK	Experiment and simulation of kinetic instabilities in electron cyclotron resonance mirror plasma
Tobias Dornheim	HZDR, CASUS, Germany	Introduction to Path Integral Monte Carlo simulations of degenerate electrons
Zhandos Moldabekov	HZDR, CASUS, Germany	Quantum hydrodynamics from time dependent density functional theory
Hassan A. Shah	FC College Univ. Lahore	Effect of trapping on shock waves in quantum plasmas
M. Zakaullah	GC Univ. Lahore	Dielectric barrier discharge and its applications
Aman-ur-Rehman	PIEAS, Islamabad	Modelling of Collisionless heating in inductively coupled plasmas
Shabbir A. Khan	NCP, Islamabad	A novel robotic THz spectroscopy system and full wave analysis of THz wave-matter interaction
Abdul Qayyum	NTPF, Islamabad	Progress in diamagnetic elements for MT-I Spherical Tokamak
Waqas Masood	COMSATS Univ. Islamabad	ZK equation for relativistically degenerate plasmas and its multi-soliton solutions
Abdur Rasheed	GC Univ. Faisalabad	Effects of magnetic quantization on ion acoustic waves in ultra-relativistic dense plasmas
M Nouman Qureshi	GC Univ. Lahore	TBD
Shahid Ali	NCP Islamabad	Plasmon excitations in metallic nanowires
M. Jamil Alvi	COMSATS Univ. Lahore	Wave-wave interaction in plasmas
Gohr Abbas	GC Univ. Lahore and Imperial College London	On the dispersion characteristics of anisotropic un-magnetized ultra-relativistic transverse plasma wave with arbitrary electron degeneracy

Plasma Physics-Theory and Applications (ISPAD-2021 NCP)(Plenary and invited talks on Zoom)

Umer Rehman	Air Univ. Islamabad	Comparative Analysis between Mathematical formulations for electromagnetic resistive drift instability in fusion plasma
Nazia Batool	NCP Islamabad	Interaction dynamics of multisolitons in cylindrically confined pair ion Plasma
Rabia Jehangir	NCP Islamabad	Interaction of electron acoustic waves in the presence of superthermal electrons in terrestrial magnetosphere
Ata ur Rehman	IC Univ. Peshawar	Compressive and rarefactive ion acoustic cnoidal waves in nonthermal plasmas
Nadia Jamil	PINSTECH Islamabad	Geomagnetic storms and their impact on ionosphere
Saba M. Gondal	UET Lahore	Beltrami states in electron-depleted multi-ion dusty plasmas
Haider Rizvi	PINSTECH Islamabad	Kinetic Alfvén eigenmode solver for tokamak plasmas
Muhammad Shahid	WU Bagh	Grad B effects on Gravitational/Rayleigh Taylor Plasma instability for space plasmas
Zafar Iqbal	GC Univ. Lahore	Occurrence of spin electron acoustic soliton in a beam interacting spin polarized plasma
Gul-e-Ali	Air Univ. Islamabad	2D drift solitary structures in inhomogeneous magnetized O-H ion plasmas with generalized (r,q) distributed electrons
M. Irfan	Univ. of Malakand, Lower Dir	Ion-acoustic dipolar vortex in partially degenerate electron-ion plasma
Usman Hassan	NCP Islamabad	Oblique interaction of electrostatic nonlinear structures in relativistically degenerate dense magnetoplasmas

Poster Session: March 10, 2021 (16:55-18:00)