Workshop on Physics with Trapped Charged Particle (WPTCP 2024)

13-14 November 2024

Program Schedule

Day 1: 13th November 2024

Time	Topic	Speaker	Affiliation
8:00 – 9:00	**Registration**		
9:00 – 9:15	**Welcome address (Director)**		
Session # I	**Session Chairperson: Dr. C. P. Safvan**		
9:15 – 10:00	Delhi Penning trap and Quantum Computing	Dr. Sugam Kumar	IUAC, New Delhi, India
10:00 – 10:30	Geonium Chip: quantum microwave technology with trapped electrons	Prof. Jose Verdu Galiana	University of Sussex, United Kingdom
10:30 – 11:00	Experiments using VECC Penning Trap for Future Nuclear Decay Rate Studies	Dr. Parnika Das	VECC, Kolkata, India
11:00 – 11:30	**Tea Break**		
Session # 2	**Session Chairperson: Prof. Wolfgang Quint**		
11:30 – 12:00	High-Precision Spectroscopy with EBITS for Applications in Astrophysics	Dr. Sonja Bernitt	GSI, Darmstadt, Germany
12:00-12:30	Developing Ultra-Compact Penning Trap and Mini-EBIT for Spectroscopic Experiments	Prof. Joseph N. Tan	NIST, USA
12:30– 14:00	**Lunch Break**		
Session # 3	**Session Chairperson: Prof. Arvind**		
14:00 – 14:30	Instrumentation Associated to Building an Ytterbium-Ion Optical Atomic Clock	Dr. Subhadeep De	IUCAA, Pune, India
14:30 – 15:00	Single Trapped Ion Based Optical Frequency Standard: A Possible Way for Redefining SI Second	Dr. Subhasis Panja	NPL, New Delhi, India
15:00 – 15:30	**Tea Break**		
Session # 4	**Session Chairperson: Prof. Jose Luis Verdu Galiana**		
15:30 – 16:00	Quantum information processing with continuous variable systems	Prof. Arvind	IISER Mohali, India
16:00 – 16:30	Cryogenic electronics and applications in novel ion traps	Dr. Stefan Stahl	Stahl Electronics, Germany
16:30 -18:30	**Poster Session and Tea/Snacks**		
19:00	**Departure for the Banquet Dinner**		

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Day 2: 14th November 2024

Time	Events	Speaker	Affiliation
Session # 5	**Session Chairperson: Prof. Joseph N. Tan**		
9:00 – 9:30	Efficient Cooling of Dynamically Captured Ion Ensembles	Dr. Stefan Ringleb	Friedrich-Schiller-Universität, Jena, Germany
9:30 – 10:00	Ion Plasmas in a Penning Trap-Collective Behaviour and Thermalisation	Dr. Manuel Vogel	GSI, Darmstadt, Germany
10:00 – 10:30	Precision Tests of Fundamental Physics with Highly Charged Ions and Antiprotons in Penning Traps	Prof. Wolfgang Quint	GSI, Darmstadt, Germany
10:30 – 11:00	**Tea Break**		
Session # 6	**Session Chairperson: Prof. Sadiq Rangwala**		
11:00 – 11:30	Towards a trapped electron quantum computer	Prof. Hartmut Häffner	University of California, Berkeley, USA
11:30 – 12:00	Quantum imaging of a polarisation sensitive phase pattern with hyper-entangled photons	Dr. Mandip Singh	IISER, Mohali, India
12:00 – 12:30	Significance of isomerisation of nitrogenated aromatic leading to formation of HNC and HCN in astrochemical surrounding	Prof. Umesh R Kadhane	IISST, Thiruvananthapuram, India
12:30 – 14:00	**Lunch Break**		
14:00 – 15:00	**Lab Tour**		
Session # 7	**Session Chairperson: Dr. Manuel Vogel**		
15:00 – 15:30	Application of Electronic Structure Calculations	Prof. Jose Paulo Santos	NOVA University Lisbon, Portugal
15:30 – 16:00	Latest results of the ALPHATRAP g-factor experiment	Dr. Fabian Heiße	MPIK Heidelberg, Germany
16:00 – 16:30	**Tea Break**		
Session # 8	**Session Chairperson: Dr. Parnika Das**		
16:30 – 17:00	Fluorescence Measurements of Gas-phase Molecular Ions Using a 16-Wire Ion Trap	Dr. S. Sunil Kumar	IISER, Tirupati, India
17:00 – 17:30	Ion Trapping with Ca+ and the Complex Autoionization of Li	Prof. Sadiq Rangwala	RRI, Bangalore, India
17:30 – 18:00	**Closing Remarks and Vote of Thanks**		
18:00 – 18:30	**Tea/Snacks**		