

12th Topical Workshop of the Stored Particles Atomic Physics Research Collaboration

Fodele Beach Hotel, Fodele, Crete

Program

Tuesday, September 22nd

18:30- 21:30	Dinner	
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Wednesday, September 23rd

Time	Title	Speaker	Duration
09:00	Registration		60`
Chair: Theo Zouros			
10:00	Welcome	Theo Zouros University of Crete	10`
10:10	SPARC overview	Reinhold Schuch University of Stockholm	20` + 5`
10:35	Current status of FAIR	Thomas Stöhlker GSI & HI-Jena	30` + 5`
11:10	Coffee Break		
11:40	New results from Penning trap experiments on highly charged ions and (anti)protons	Wolfgang Quint GSI	45` + 5`
12:30	Lunch break		
Chair: Alexandre Gumberidze			
15:00	Relativistic theory of the nuclear recoil effect in highly charged ions	Vladimir Shabaev St. Petersburg State University	25` + 5`
15:30	The ALPHATRAP Experiment	Andreas Weigel MPIK Heidelberg	20` + 5`
15:55	Zeeman splitting in boron-like ions: g-factor and non-linear effects	Dmitry Glazov St. Petersburg State University	25` + 5`
16:25	Quantum gas target	Bastian Höltekemeier University of Heidelberg	20` + 5`
16:50	Coffee Break		
Chair: Jimmy Rangama			
17:15	CRYRING@ESR project status	Michael Lestinsky GSI	25` + 5`
17:45	Laser cooling facility at SIS100	Danyal Winters GSI	15`+5`
18:05	Status report APPA Cave	Angela Bräuning-Demian GSI	15` + 5`
18:25	The High Energy Storage Ring	Dieter Prasuhn FZ Jülich	25` + 5`
19:00	Welcome Dinner		

Thursday, September 24th

Time	Title	Speaker	Duration
Chair: Volker Hannen			
9:00	Astrophysics experiments in storage rings	Yuri Litvinov GSI & Univ. Heidelberg	25' +5'
9:30	High Precision X-Ray Spectroscopy at the ESR	Tobias Gassner HI-Jena	25' +5'
10:00	High Resolution von Hamos Spectrometer for low Energy X-ray Spectroscopy at CRYRING	Dariusz Banas University of Kielce	25' +5'
10:30	Coffee break		
Chair: Vladimir Shabaev			
11:00	Capture of atomic electron into low-energy continuum states of highly charged ion in relativistic collisions	Oleg Andreev St. Petersburg State University	25' +5'
11:30	Radiation processes in low-energy heavy-ion collisions	Yury Kozhedub St. Petersburg State University	25' +5'
12:00	Low-energy ion collisions	Alexandre Gumberidze GSI and Univ. of Frankfurt	25' +5'
12:30	Lunch break		
Chair: Sergiy Trotsenko			
15:00	Electron-collision spectroscopy of highly charged ions at ESR and CRYRING	Stefan Schippers University of Giessen	25' +5'
15:30	Experiments with the electron target of the CRYRING	Carsten Brandau University of Giessen	25' +5'
16:00	Internal Target at CRYRING	Nikos Petridis GSI	25' +5'
16:30	Coffee Break		
Chair: Jose Paulo Santos			
17:00	High accuracy measurements of transition energies in Highly Charged Ions with a Double-Crystal Spectrometer	Jorge Machado LIBPhys-UNL and LKB	20' +5'
17:25	Solution of the time-dependent Dirac equation for a H-like ion exposed to a strong laser field	Irina Ivanova St. Petersburg State University	20' +5'
17:50	Laser spectroscopy experiments at HITRAP and CRYRING	Zoran Andelkovic GSI	20' +5'
Collaboration Meeting			
18:30	Topics: Funding Situation, International and National, Common Funds, Status Reports	Reinhold Schuch	
19:30	Dinner		

Time	Title	Speaker	Duration
Chair: Saskia Kraft-Bermuth			
9:00	Spectroscopic investigations in high-Z few-electron ions using the resonant coherent excitation in crystals	Angela Bräuning-Demian GSI	25' +5'
9:30	High photon flux narrow-band XUV sources for laser spectroscopy of highly-charged ions	Jan Rothhardt HI-Jena	25' +5'
10:00	SPARC detectors and polarimetry: New results from PETRAIII	Günter Weber HI-Jena	25' +5'
10:30	Coffee Break		
Chair: Dominique Vernhet			
11:00	Helmholtz beamline	Thomas Kühl GSI	25' +5'
11:30	Gamma and Laser beam induced nuclear and atomic physics at ELI-NP	Septimiu Balascuta ELI-NP, Bucharest	25' +5'
12:00	Plasma Physics Experiments with Intense Heavy Ion and Proton Beams at FAIR	Abel Blazevic GSI	25' +5'
12:30	Lunch break		
Chair: Daniela Fluerasu			
15:00	Isotope Shifts of the Energy Levels in Highly Charged Ions	Natalia Zubova St. Petersburg State University	20' +5'
15:25	Setup of a high-resolution fluorescence spectrometer for experiments at ion storage rings	Philipp Reiss University of Kassel	20' +5'
15:50	Observation of Coherence in the Time-Reversed Relativistic Photoelectric Effect	Stanislav Tashenov University of Heidelberg	20' +5'
16:15	Highly charged ions impact, a promising route to exploit the refrigeration power of giant magnetocaloric thin films	Martino Trassinelli CNRS, INSP	20' +5'
16:40	Coffee Break		
Chair: Ilya Tupitsyn			
17:00	Highly charged ions in search towards the variation of fundamental constants	Natalia Oreshkina MPIK Heidelberg	25' +5'
17:30	Ion induced molecular dissociation	C.P. Safvan IUAC, New Delhi	25' +5'
18:00	Poster session with coffee		
20:00	Conference dinner		

Time	Title	Speaker	Duration
Chair: C.P. Safvan			
09:00	Auger electron yields of metastable Li-like projectile states repopulated by radiative cascades and Auger depletion	Emmanouil Benis University of Ioannina	25`+5`
09:30	The magnetic toroidal sector: a broad-band electron-positron pair spectrometer	Siegbert Hagmann GSI	25`+5`
10:00	X-ray emissions from the decay of highly charged ions via overlapping resonances	Zhongwen Wu HI-Jena	25`+5`
10:30	Coffee Break		
Chair: Wolfgang Quint			
11:00	DESIREE: Double ElectroStatic Ion-Ring ExpEriment	Henning Schmidt University Stockholm	25`+5`
11:30	First operation of the cryogenic electrostatic storage ring CSR	Robert von Hahn MPIK Heidelberg	25`+5`
12:00	Status of the FISIC Project	Dominique Vernhet CNRS, UPMC, INSP	25`+5`
12:30	Lunch		
14:00	Excursion		
21:00	Dinner		
	End of Workshop		