

## 12<sup>th</sup> Topical Workshop of the Stored Particles Atomic Physics Research Collaboration

Fodele Beach Hotel, Fodele, Crete

## **Preliminary Program**

Tuesday, September 22<sup>nd</sup>

18:00 Welcome and Dinner

12<sup>th</sup> Topical Workshop of SPARC: Preliminary Program

Wednesday, September 23<sup>rd</sup>

Time	Title	Speaker	Duration		
SPARC and FAIR					
09:00	Registration		60`		
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 antiprotons	Wolfgang Quint GSI	45`+ 5`		
12:30	Lunch break Zeeman splitting in boron-like ions: g-factor and non-linear effects	Dmitry Glazov University of St. Petersburg	25`+ 5`		
15:30	Quantum gas target	Bastian Höltkemeier University of Heidelberg	25`+ 5`		
16:00	The ALPHATRAP Experiment	Andreas Weigel MPIK Heidelberg	25`+ 5`		
16:30					
Status of the SPARC Facilities					
17:00	CRYRING@ESR	Michael Lestinsky GSI	25`+ 5`		
17:30	APPA Cave	Angela Bräuning-Demian GSI	25`+ 5`		
18:00	HESR	Dieter Prasuhn FZ Jülich	25`+ 5`		
19:00	Dinner	1	1		

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## Thursday, September 24<sup>th</sup>

Time	Title	Speaker		Duration
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 X-ray Spectrometer	Darius Banas University of Kielce		25`+5`
10:30				
11:00	Capture of atomic electron into low-energy continuum states of highly charged ion in relativistic collisions	Oleg Andreev University of St. Petersburg		25`+5`
11:30	Relativistic calculations of x-ray emission following Xe/Bi <sup>83+</sup> collisions	Yury Kozhedub University of St. Petersburg		25`+5`
12:00	Low-energy ion collisions	Alexandre Gumberidze GSI and Univ. of Frankfurt		25`+5`
	Electron-collision spectroscopy of highly	Stefan S	Schippers	
15:00	Electron-collision spectroscopy of highly charged ions at ESR and CRYRING Experiments with the electron target of the	University	Schippers of Giessen Brandau	25`+5` 25`+5`
15:00 15:30	charged ions at ESR and CRYRING Experiments with the electron target of the CRYRING	University Carsten University	of Giessen Brandau of Giessen	25`+5` 25`+5`
	charged ions at ESR and CRYRING Experiments with the electron target of the	University Carsten University Natalia	of Giessen Brandau	
15:30	charged ions at ESR and CRYRINGExperiments with the electron target of the CRYRINGIsotope Shifts of the Energy Levels in	University Carsten University Natalia	of Giessen Brandau of Giessen Zubova	25`+5`
15:30 16:00	charged ions at ESR and CRYRINGExperiments with the electron target of the CRYRINGIsotope Shifts of the Energy Levels in Highly Charged Ions	University Carsten University Natalia University of Jorge N	of Giessen Brandau of Giessen Zubova	25`+5`
15:30 16:00 16:30	charged ions at ESR and CRYRINGExperiments with the electron target of the CRYRINGIsotope Shifts of the Energy Levels in Highly Charged IonsCoffee BreakHigh accuracy measurements of transition energies in Highly Charged Ions with a	University Carsten University Natalia University of Jorge N LIBPhys-U	of Giessen Brandau of Giessen Zubova St. Petersburg	25`+5` 25`+5`
15:30 16:00 16:30 17:30 17:00	charged ions at ESR and CRYRINGExperiments with the electron target of the CRYRINGIsotope Shifts of the Energy Levels in Highly Charged IonsCoffee BreakHigh accuracy measurements of transition energies in Highly Charged Ions with a Double-Crystal SpectrometerLaser spectroscopy experiments at	University Carsten University Natalia University of Jorge N LIBPhys-U	of Giessen Brandau of Giessen Zubova St. Petersburg Machado NL and LKB	25`+5` 25`+5` 25`+5`
15:30 16:00 16:30 17:30 17:00	charged ions at ESR and CRYRINGExperiments with the electron target of the CRYRINGIsotope Shifts of the Energy Levels in Highly Charged IonsCoffee BreakHigh accuracy measurements of transition energies in Highly Charged Ions with a Double-Crystal SpectrometerLaser spectroscopy experiments at HITRAP and CRYRING	University Carsten University Natalia University of Jorge N LIBPhys-U Zoran And	of Giessen Brandau of Giessen Zubova St. Petersburg Machado NL and LKB	25`+5` 25`+5` 25`+5` 25`+5`



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9:00	Resonant Coherent Excitation	Angela Bräuning-Demian GSI	25`+5`	
9:30	High photon flux narrowband 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			
11:00	Helmholtz beamline	Vincent Bagnoud 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	ТВА	Abel Blazevic GSI	25`+5`	
12:30	Lunch break	Nikos Petridis	25`+5`	
15:00	-	GSI	20 +0	
15:30	Setup of a high-resolution fluorescence spectrometer for experiments at ion storage rings	Philipp Reiss University of Kassel	25`+5`	
16:00	Highly charges ions impact, a promising route to exploit the refrigeration power of giant magnetocaloric thin films	Martino Trassinelli CNRS, INSP	25`+5`	
16:30	Coffee Break			
16:45	Highly charged ions in search towards the variation of fundamental constants	Natalia Oreshkina MPIK Heidelberg	25`+5`	
17:15	ТВА	Cholakka P. Safvan IUAC, New Delhi	25`+5`	
17:45	Poster session with coffee			
20:00	Conference dinner			

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## Saturday, September 26<sup>th</sup>

Time	Title	Speaker	Duration
09:00	Auger electron yields of metastable Li-like projectile states repopulated by radiative cascades and Auger depletion	Emmanouil Benis University of Ioannina <b>25`+5</b> `	
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		
	ional Landscape: Atomic Physics Activities F nental facilities of relevance for SPARC relate		
11:00	DESIREE	Henning Schmidt University Stockholm	25`+5`
11:30	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		
	End of Workshop		