Program

	30th, Sunday	1st, Monday	2nd, Tuesday	3rd, Wednesday	4th, Thursday	5th, Friday
8:00		COFFEE & REGISTRATION	COFFEE	COFFEE	COFFEE	COFFEE
8:30		(International Conference Hall, Takamatsu Symbol Tower	Litvinov		Yao	Toyoda
0.30		Tower Bldg. 6F)	LITAINOA		Nakamura	Vogel
9:00		Wada		Cornell		Glazov
		En'yo	Zhang		Versolato	Storphorg
9:30			Yamaguchi	Drewson	Fabian	Sternberg
		Yamazaki	Nörtershäuser		Baumann	Lienard
10:00				Kuroda	Oreshkina	COFFEE
10:30		Hori	Wakasugi	COFFEE & MINGLING	Ali	Melconian
		Composed	COFFEE		COFFEE	Hasegawa
11:00		Comparat		Bollinger		lto
			Schmidt		Willmann	1.0
11:30		LUNCH		Fujiwara	Brunner	Ringle
12:00		LONGIT	Azuma	Storry	Shabaev	Rosenbusch
			Furukawa	Storry		
12:30		Andelkovic			Kawamura	
			Chen CONFERENCE PHOTO		Smorra	LUNCH
13:00		Herfurth	CONFERENCE PHOTO		Chupp	
13:30		Redshaw				Nagy
		Eibach	LUNCH			Kwiatkowski
14:00		Mehlman			LUNCH	
		COFFEE				Clark
14:30						COFFEE
15:00		Ulmer	Wollnik		Leibfried	Eronen
		Perez				Block
15:30		Gutierrez	Plaß		Roos	
		Pusa	Wolf		Kim	Summary
16:00		Simon	COFFEE	EXCURSION (Garden, Food, Culture)	COFFEE	
16:30		Simon				
			Schury	_	Sturm	
17:00			Schweikhard		Eliseev	
17.00		POSTER SESSION	Dickel		Dzuba	
17:30	REGISTRATION (CIERO Exhibition hall,	(International Conference Hall, Takamatsu Symbol Tower,	Saito			
18:00	JR Clement Hotel 21F)	Hall Bldg.1F)			Fujita	
			LEAVE FOR			
18:30			BANQUET			
19:00	RECEPTION (CIERO Exhibition hall,					
	JR Clement Hotel 21F)					
19:30						
			BANQUET			
20:00			(Hanajukai)			
20:30						
21:00						
	Anti-H	Hydrogen	lon Tra	ps for HCl	Storage	Rings
	Appli	cations of Particle Tra		nental Interactions and	d Joint Se	ession
			Symme			
	Quan	tum and QED Effects		on Spectroscopy and ncy Standard		

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AN MERSING

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lst, Monday

8:00 COFFEE & REGISTRATION

Session 1A-1 Chair: Wada, Michiharu

Openir	Ig			
9:00	Wada, Michiharu	Opening remarks		15
9:15	En'yo, Hideto	Welcome to TCP in Takamatsu		15
Anti-H	ydrogen (1)			
9:30	Yamazaki, Yasunori	What (anti-)matters with antimatter?	P. 13	40+10
10:20	Hori, Masaki	Two-photon laser spectroscopy of antiprotonic Helium and antiproton-to-electron mass ratio	P. 14	20+5
10:45	Comparat, Daniel	Present status of the AEgIS Experiment and prospect for cooling antiprotons.	P. 15	20+5
11:10	LUNCH			80

Same and

Session 1P-1 Chair: Sakemi, Yasuhiro

lon Tra	aps for HCI (1)		_	
12:30	Andelkovic, Zoran	Experiments with highly charged ions at HITRAP	P. 16	20+5
12:55	Herfurth, Frank	Deceleration and storage of highly charged ions and antiprotons at GSI/FAIR	P. 17	20+5
13:20	Redshaw, Matthew	CHIP-TRAP: A high-precision double Penning trap mass spectrometer for stable and long-lived radioactive isotopes	P. 18	15+5
13:40	Eibach, Martin	Mass measurements of rare isotopes with a single ion	P. 19	15+5
14:00	Mehlman, Michael	Current status of the TAMUTRAP facility	P. 20	15+5
14:20	COFFEE			20

Session 1P-2 Chair: Fujiwara, Makoto

Anti-H	ydrogen (2)			
14:40	Ulmer, Stefan	First direct high-precision measurement of the magnetic moment of the proton and status of BASE	P. 21	20+5
15:05	Perez, Patrice	The GBAR antimatter gravity experiment	P. 22	20+5
15:30	Gutierrez, Andrea	Antiproton cloud radial compression in the ALPHA apparatus at CERN	P. 23	15+5
15:50	Pusa, Petteri	Antihydrogen annihilation vertex detection in the ALPHA experiment	P. 24	15+5
16:10	Simon, Martin	A spectroscopy beamline for the hyperfine structure of antihydrogen and its characterization with a Hydrogen beam	P. 25	15+5
17:00 POSTER SESSION (Exhibition Hall, Hall Bldg. 1F)			120	

2nd, Tuesday

8:00 COFFEE

Session 2A-1 Chair: Schuch, Reinhold

Storag	je Rings			
8:10	Litvinov, Yuri	Beta-decay of highly-charged ions	P. 26	40+10
9:00	Zhang, Yu Hu	Precision mass measurements of short-lived nuclides at storage ring in Lanzhou	P. 27	20+5
9:25	Yamaguchi, Yoshitaka	Rare-RI ring at RIKEN RI Beam Factory	P. 28	20+5
9:50	Nörtershäuser, Wilfried	Laser-based tests of fundamental symmetries and interactions at the ESR	P. 29	20+5
10:15	Wakasugi, Masanori	The SCRIT electron scattering facility	P. 30	20+5
10:40 COFFEE 2				20

A HANNER

Session 2A-2 Chair: Uesaka, Tomohiro*

11:00	Schmidt, Henning	Low energy storage rings for molecular physics	P. 31	40+10
11:50	Azuma, Toshiyuki	RIKEN's new cryogenic electrostatic ion storage ring for atomic and molecular physics: RICE	P. 32	20+5
12:15	Furukawa, Takeshi	Rapid cooling of isolated small carbon cluster anions	P. 33	15+5
12:35	Chen, Xiangcheng	A new approach to the particle position detection in a storage ring	P. 34	15+5

12:55	CONFERENCE PHOTO	15	
13:10	LUNCH	80	

Session 2P-1 Chair: Litvinov, Yuri

Applic	ations of Particle Trappi	ng (1)		
14:30	Wollnik, Hermann	High-resolving mass analyzers	P. 35	40+10
15:20	Plaß, Wolfgang	First direct mass measurements with the MR-TOF-MS at the FRS ion catcher	P. 36	20+5
15:45	Wolf, Robert	Multi-reflection time-of-flight mass separation and spectrometry at ISOLTRAP/ ISOLDE	P. 37	20+5
16:10	16:10 COFFEE 2			

Session 2P-2 Chair: Schwarz Stefan

19:00 BANQUET (Hanajukai)

Sessio	on 2P-2 Chair: Schwarz	z, Stefan		
16:30	Schury, Peter	High-precision mass measurements of trans-Uranium nuclei by MRTOF-MS: shifting the paradigm in SHE-identification	P. 38	20+5
16:55	Schweikhard, Lutz	Polyanion production in Penning and RFQ ion traps	P. 39	15+5
17:15	Dickel, Timo	The MR-TOF isobar separator for the TITAN facility at TRIUMF	P. 40	15+5
Funda	mental Interactions and	Symmetries (1)		
17:35	Saito, Naohito	Muon's g-2 experiment at J-PARC	-	20+5
18:00	LEAVE FOR BANQUET			60

8

TCP2014 - 6th International Conference on Trapped Charged Particle and Fundamental Physics - Takamatsu, Japan

3rd, Wednesday

8:00 COFFEE

Session 3A-1 Chair: Schweikhard, Lutz

Joint S	Session			
8:30	Cornell, Eric	Measuring the electron's electric dipole moment in a trapped molecular ion.	P. 41	40+10
9:20	Drewson, Michael	Quantum state preparation of single molecular ions	P. 42	25+5
9:50	Kuroda, Naofumi	The ASACUSA CUSP experiment	P. 43	25+5
10:20	COFFEE & MINGLING			30

A MARSHOW

10:20 COFFEE & MINGLING

Sessi	on 3P-1 Chair: Higaki,	Hiroyuki		
10:50	Bollinger, John	Sensitive detection of modes and quantum simulation ith 2D arrays of trapped ions	P. 44	25+5
11:20	Fujiwara, Makoto	Fundamental physics with the ALPHA antihydrogen trap	P. 45	25+5
11:50	Storry, Cody	A new hydrogenic atom, e*H \prime / Positron systems for antihydrogen and other positronic atom physics	P. 46 P. 47	30+5
12:25	EXCURSION (Garden, F	ood, Culture)		-

4th, Thursday

8:00 COFFEE

Session 4A-1 Chair: Azuma, Toshiyuki

Ion Traps for HCI (2)				
8:10	Yao, Ke	The high precision mass spectrometer-SMILETRAP meets an EBIT in Shanghai	P. 48	20+5
8:35	Nakamura, Nobuyuki	Spectroscopic studies of highly charged ions at the Tokyo electron beam ion trap facility	P. 49	20+5
9:00	Versolato, Oscar	Coulomb-crystalized highly charged ions	P. 50	20+5
9:25	Fabian, Xavier	Using GPU parallelization to perform realistic simulations of the LPCTrap experiments : from a trapped ion cloud to a time-of-flight measurement	P. 51	15+5
9:45	Baumann, Thomas	Status of the ReA electron beam ion trap charge breeder at NSCL	P. 52	15+5
10:05	Oreshkina, Natalia	Dynamical effects in the X-ray transition strengths of astrophysically relevant Fe ¹⁶⁺ ions	P. 53	15+5
10:25	Safdar, Ali	High-resolution intensity ratio measurements in EUV spectral wavelength for ions of astrophysical ineterst	P. 54	15+5

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10:45 COFFEE

Session 4A-2 Chair: Doser, Michael

Funda	mental Interactions and	Symmetries (2)		
11:05	Willmann, Lorenz	Parity violation measurements in trapped single radium ions	P. 55	20+5
11:30	Brunner, Thomas	Ba-ion extraction from high-pressure Xe gas for double-beta decay studies with nEXO	P. 56	20+5
11:55	Shabaev, Vladimir M.	Fundamental physics with highly charged ions at low energies	P. 57	20+5
12:20	Kawamura, Hirokazu	Magneto-optical trapping of radioactive atoms for test of the fundamental symmetries	P. 58	15+5
12:40	Smorra, Christian	BASE - High-precision tests of CPT invariance using antiprotons	P. 59	15+5
13:00	Chupp, Tim	Muon's g-2 experiment at Fermi-lab.	-	20+5

13:25 LUNCH

Session 4P-1 Chair: Sugiyama, Kazuhiko

Quantum and QED Effects (1)					
14:30	Leibfried, Dietrich	Scalable quantum information processing with trapped ions at NIST	P. 60	40+10	
15:20	Roos, Christian	Engineering and observation of interacting quasiparticles in a trapped-ion many- body system	P. 61	20+5	
15:45	Kim, Taehyun	Development of the quantum repeater based on trapped lons	P. 62	20+5	
				1	

16:10 COFFEE

Session 4P-2 Chair: Nakamura, Nobuyuki

Precision Spectroscopy and Frequency Standard (1)				
16:30	Sturm, Sven	The g-factor of highly charged ions - Stress test for the Standard Model and access to the mass of the electron	P. 63	20+5
16:55	Eliseev, Sergey	PI-ICR technique for mass measurements on short-lived nuclides and the PENTATRAP project	P. 64	20+5
17:20	Dzuba, Vladimir	Highly charged ions for atomic clocks and search for variation of the fine structure constant	P. 65	20+5
17:45	Fujita, Tomomi	Laser spectroscopy of atoms in superfluid helium for the measurement of nuclear spins and electromagnetic moments of radioisotope atoms	P. 66	15+5

TCP2014 - 6th International Conference on Trapped Charged Particle and Fundamental Physics - Takamatsu, Japan

20

65

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5th, Friday

8:00 COFFEE

Session 5A-1 Chair: Schmidt, Henning*

Quantum and QED Effects (2)							
8:10	Toyoda, Kenji	Quantum simulation of the Jaynes-Cummings-Hubbard Model using trapped ions	P. 67	20+5			
8:35	Vogel, Manuel	Extreme field physics in Penning traps	P. 68	15+5			
8:55	Glazov, Dmitry	Quadratic Zeeman effect in highly charged ions	P. 69	15+5			
Applic	Applications of Particle Trapping (2)						
9:15	Sternberg, Matthew	Precision β -decay experiments with the β -decay Paul trap	P. 70	20+5			
9:40	Lienard, Ettienne	Precision measurements with LPCTrap at GANIL	P. 71	20+5			
10:05 COFFEE				15			

15 Miles

Session 5A-2 Chair: Ban, Gilles

10:20	Melconian, Dan	A new correlation Penning trap for fundamental physics at Texas A&M	P. 72	20+5		
10:45	Hasegawa, Shuichi	Ion trap and laser cooling spectroscopy for isotope analysis	P. 73	15+5		
11:05	lto, Yuta	Gas-cell beam cooler-buncher for low-energy experiments at SLOWRI	P. 74	15+5		
Precisi	ion Spectroscopy and Fr	requency Standard (2)				
11:25	Ringle, Ryan	Penning trap mass spectrometry at the LEBIT facility	P. 75	20+5		
11:50	Rosenbusch, Marco	Probing exotic nuclei through mass measurements from ISOLTRAP	P. 76	20+5		
12:15	2:15 LUNCH			60		

Session 5P-1 Chair: Kluge, H.-Jürgen

13:15	Nagy, Szilard	High-precision Penning-trap mass measurements at TRIGA-TRAP	P. 77	20+5
13:40	Kwiatkowski, Ania	TITAN: The ion trapping program at TRIUMF	P. 78	20+5
14:05	Clark, Jason	The Canadian Penning trap mass spectrometer at CARIBU	P. 79	20+5
14:30	14:30 COFFEE			15

Session 5P-2 Chair: Kluge, H.-Jürgen

14:45	Eronen, Tommi	On-going developments and measurements at JYFLTRAP	P. 80	20+5
15:10	Block, Michael	Recent developments for investigations of the heaviest elements with SHIPTRAP	P. 81	20+5
15:35	ТВА	Summary		25

*: to be confirmed

Poster Session

1	Park, Young-ho	Sympathetic laser cooler for highly charged ions at RAON facility	ІТ	P. 82
1		An overview of the high-precision mass measurement system for RAON		F. 02
2	Chaudhuri, Ankur	facility	IT	P. 83
3	Singh, Prithvi	Effect of projectile charge on electron and positron impact single ionization cross section of water molecule	FI	P. 84
4	lm, Kang-bin	Simulation of the sympathetic cooling of highly charged ions using a GPU	IT	P. 85
5	Reponen, Mikael	Optical pumping and resonance ionization of trapped ions at IGISOL	IT, AP	P. 86
6	Fuke, Kiyokazu	Preparation of cold ions in magnetic field and its application to gas- phase NMR spectroscopy	AP	P. 87
7	Jordan, Elena	Towards Laser Doppler Cooling of Negative lons in a Penning Trap	AP	P. 88
8	Takamine, Aiko	Precision Measurements of Hyperfine Structure Constants and 2s-2p Transition Frequencies for Laser-Cooled Radioactive Beryllium Isotopes	PS, IT	P. 89
9	lto, Kiyokazu	Experimental study on dipole motion of an ion plasma confined in a linear Paul trap	PE, AP	P. 90
10	Belov, Nikolay A.	Pair creation and annihilation with atoms and channeling nuclei	FI, PS, QQ	P. 91
11	Fujisaki, Hiroto	Laser-diode-based light source for single-ion spectroscopy of the $^2S_{1/2}$ - $^2D_{5/2}$ clock transition in Ba+ at 1.76 μ m	PS	P. 92
12	Harries, James R.	Compact EBITs with large fields-of-view using permanent magnets and optimized for use at synchrotron and FEL beamlines	IT	P. 93
13	Singh, Rohtash	Effect of an Axial Magnetic Field and Ion Space Charge on Trapped Charged Particle in LBWA	PE	P. 94
14	Okada, Kunihiro	Characterization of ion Coulomb crystals for fundamental sciences	PS, PE	P. 95
15	Sakaue, Hiroyuki A.	EUV spectra of highly charged tungsten ions studied with an Electron Beam Ion Traps	ІТ	P. 96
16	Delahaye, Pierre	The LPCTrap measurement trap: an open Paul trap for fundamental tests	FI, IT, AP	P. 97
17	Inoue, Takeshi	Development of the optical magnetometer toward the search for the electron electric dipole moment	FI	P. 98
18	Tarlton, James	High-fidelity operations with calcium ion qubits	AP	P. 99
19	Funayama, Chikako	Performance assessment of a new laser system for efficient spin exchange optical pumping in a spin maser measurement of ¹²⁹ Xe EDM	FI	P. 100
20	Masuda, Takahiko	Rate amplification of the two photon emission from para-hydrogen toward the neutrino mass measurement	QQ	P. 101
21	Arai, Fumiya	An ion-surfing RF-carpet gas cell for transuranium nuclei study at GARIS-II	IT	P. 102
22	Numadate, Naoki	Development of a Kingdon ion trap for observation of the forbidden X- ray transitions in solar wind charge exchange	AP	P. 103
23	Hrmo, Pavel	Sideband Cooling to the Ground State of a Calcium-40+ Ion in a Penning Trap	QQ, AP	P. 104
24	Michan, Mario	Towards Laser Cooling of Antihydrogen	АН	P. 105
25	Sternberg, Matthew G.	Cyclotron radiation emission spectroscopy (CRES) with trapped electrons	PS, NNP	P. 106
26	Dupré, Pierre	High-resolution mass separation by phase splitting and fast centering of ion motion in a Penning trap	AP, NNP	P. 107
27	Gutierrez, Andrea	Antiproton cloud radial compression in the ALPHA apparatus at CERN	АН, ТСР	P. 108
28	lto, Yuta	Gas-cell beam cooler-buncher for low-energy experiments at SLOWRI	IT, AP, TCP	P. 109

Same and

AH: Anti-HydrogenAP: Applications of Particle TrappingFI: Fundamental Interactions and SymmetriesIT: Ion Traps for Radioactive Nuclei and Highly Charged IonsPE: Plasma Effects and Collective BehaviorPS: Precision Spectroscopy and Frequency StandardQQ: Quantum and QED EffectsNNP: speaker in NNPTCP: speaker in TCP