# Conference Program

## Monday, October 18

Times	Code	Туре	min	Presenter	Title					
08:45 - 09:10		Opening session Presiding: M. Craddock								
			15	H. Kamitsubo (RIKEN)	Opening address					
			10	J. Conradie (IThemba Labs)	Dedication in honor of Dr. H. Jungwirth					
09:10 - 11:00					BA : Facilities under construction I Presiding: P. Schmelzbach					
	18A1	Invited	30	Y. Yano (RIKEN)	RI Beam Factory Project at RIKEN					
	18A2	Invited	30	W. Zhan (IMP)	Progress of HIRFL-CSR					
	18A3	Invited	30	A. Geisler (ACCEL)	ACCEL Superconducting 250 MeV Proton Cyclotron					
	18A4	Invited	20	R. Bhandari (DAE/VECC)	Status of the Kolkata K500 Superconducting Cyclotron					
11:30 - 13:00					Session 18B : Status I Presiding: F. Marti					
	18B1	Invited	30	B. Jacquot (GANIL)	GANIL-SPIRAL Status					
	18B2	Invited	30	P. Miller (NSCL)	Status of the Coupled Cyclotron Facility at NSCL					
	18B3	Invited	30	H. Fitze (PSI)	Developments at PSI (including new RF cavity)					
14:30 - 16:00		Poster session	18P : Be	am Diagnostics / Beam Transp	port / Control / Facilities under construction / Status / Project and Proposals					
	18P01			K. Abbas (IHCP/JRC)	SLIM - An Innovative Non-destructive Beam Monitor for Beam-Lines of Medical Cyclotrons					

S. Hojo (NIRS)  A Beam Energy Measurement System at NIRS-930 Cyclotron  S. Okumura (JAERI/Takasaki)  Instrumentation for Measurement of Beam Energy Spread  N. Fukunishi (RIKEN)  Beam Quality Studies on RIKEN Ring Cyclotrons and RI Beam Factory Project  M. Dehnel (Nelson)  Industrial Beamline Developments for Radioisotope Producers  D. Toprek (VINCA)  Low Energy Beamline at the AGOR-Facility  P. Belicev (VINCA)  Injection Transport Line of the VINCY Cyclotron  18P08  D. Fourie (IThemba Labs)  New Beam Lines for the Production of Radioisotopes at iThemba LABS.	
18P04 N. Fukunishi (RIKEN) Beam Quality Studies on RIKEN Ring Cyclotrons and RI Beam Factory Project  18P05 M. Dehnel (Nelson) Industrial Beamline Developments for Radioisotope Producers  18P06 D. Toprek (VINCA) Low Energy Beamline at the AGOR-Facility  18P07 P. Belicev (VINCA) Injection Transport Line of the VINCY Cyclotron	
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D. Fourie (IThemba Labs)  New Beam Lines for the Production of Radioisotopes at iThemba LABS.	
L. Jing (IMP)  A Beam Diagnostic and Control Module	
T. Tanabe (RIKEN)  RIKEN RI-Beam Factory Power Supply Control System	
J. Miszczak (Warsaw Univ.) Control System for the Warsaw Cyclotron	
S. Brandenburg (KVI)  Beamphase Measurement in the AGOR-Cyclotron	
18P13 Y. Kim (KIRAMS) Design of KIRAMS-13 Cyclotron Control System	
J. Ohnishi (RIKEN) Construction Status of the RIKEN Intermediate-stage Ring Cyclotron (IRC)	
N. Inabe (RIKEN) Fixed-frequency Ring Cyclotron (fRC) in RIBF	
18P16 B. Gikal (JINR) Upgrading of the DC-40 Cyclotron	
S. Ninomiya (RCNP)  Ultra High Stabilization of the Magnetic Field of the RCNP Cyclotron	
18P18 M. Fujita (CYRIC) Present Status of the K=110 MeV AVF Cyclotron at Tohoku University	
T. Endo (CYRIC) H- Acceleration with AVF-930 Cyclotron	
T. Duh (INER)  The Current Status and Future Prospects of TR 30/15 H-/D- Cyclotron Facility at INER in	Taiwan
R. Risler (Univ. of Washington) 20 Years of Clinical Operation with the Fast Neutron Therapy System in Seattle	

	18P22			T. Honma (NIRS)	Improvements and Applications at NIRS Cyclotron Facility
	18P23			Y. Nakamura (JAERI/Takasaki)	Status Report on JAERI-AVF Cyclotron System
	18P24			M. Kase (RIKEN)	Present status of the RIKEN Ring Cyclotron
	18P25			M. Kase (RIKEN)	Co-generation System for the RIBF Accelerators
	18P26			J. Kang (KIRAMS)	The Design Study on the Magnet and RF Systems of a 5 MeV H- Cyclotron
	18P27			B. Gikal (JINR)	Project of DC-60 Cyclotron with Smooth Ion Energy Variation for Research Center in L.N.Gumilev Euroasia State University in Astana (Kazakhstan)
	18P28			N. Miyawaki (JAERI/Takasaki)	Project of the JAERI Superconducting AVF Cyclotron for Applications in Biotechnology and Materials Science
	18P29			Z. Li (CIAE)	General Engineering Considerations for the 100MeV Cyclotron
16:05 - 18:10					Session 18C : Status II Presiding: L. Onischenko
	18C1	Invited	30	L. Calabretta (INFN/LNS)	LNS Catania Project for Therapy and Radioisotope Production
	18C1 18C2	Invited Invited	30 20	L. Calabretta (INFN/LNS)  K. Sato (RCNP)	LNS Catania Project for Therapy and Radioisotope Production  Developments at RCNP
	18C2	Invited	20	K. Sato (RCNP)	Developments at RCNP
	18C2 18C3	Invited Invited	20	K. Sato (RCNP) G. Dutto (TRIUMF)	Developments at RCNP  TRIUMF High Intensity Cyclotron Development for ISAC

### Tuesday, October 19

Times	Code	Туре	min	Presenter	Title				
09:00 - 11:05		Session 19A : Ion Sources I Presiding: Y. Mori							
	19A1	Invited	30	J. Ishikawa (Kyoto Univ.)	Report (Summary) of the 10TH International Conference on Ion Sources				
	19A2	Invited	30	S. Gammino (INFN/LNS)	Superconducting ECR Ion Sources: High Intensity Beams Extraction and Transport				
	19A3	Invited	20	R. Leroy (GANIL)	Ion Sources at GANIL				
	19A4	Contributed	15	T. Nakagawa (RIKEN)	Intense Heavy Ion Beam Production from RIKEN ECRISs				
	19A5	Contributed	15	H. Zhao (IMP)	Development of ECR Ion Sources at HIRFL				
	19A6	Contributed	15	C. Lyneis (LBNL)	First Results for the 28 GHZ Operation of the Superconducting ECR Ion Source VENUS				
11:30 - 13:05				Session	19B : Applications / Status III Presiding: H. Homeyer				
	19B1	Invited	20	J. Flanz (MGH)	Operational Experience with Cyclotron for Proton Therapy				
	19B2	Invited	20	S. Yoshida (RIKEN)	The Ion-beam Breeding Makes Great Success in Plant Business				
	19B3	Invited	20	A. Denker (HMI)	Applications of High-energy Ions in Materials Science				
	19B4	Contributed	15	S. Enomoto (RIKEN)	Development of a Gas-jet-coupled Mutitracer System for Multitracer Production and its Application for Bioscience				
	19B5	Invited	20	L. Onischenko (JINR)	Cyclotron CYTRACK for Membrane Production				
14:30 - 16:00				Poster session 19P :	Applications / FFAG / Ion Sources / Others				
	19P01			F. Saito (Univ. of Tokyo)	Application of an Electro-chemical Method to the Production of 18F-pharmaceuticals				
	19P02			S. Kim (KIRAMS)	A Steady Production of F-18-FDG with KIRAMS-13 Cyclotron at KIRAMS				

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19P03	B. Hong (KIRAMS)	Double Grid 180 Water Target for KIRMAS-13
19P04	U. Holzwarth (IHCP/JRC)	Production of Miniaturized 72Se/72As Positron Generators for Applications in Materials Science
19P05	K. Abbas (IHCP/JRC)	Use of the Scanditronix MC 40 Cyclotron of the JRC (EC) for FDG Production in Compliance with the European GMPc
19P06	A. Arzumanov (INP NNC RK)	TechniqueE of NB-GA Target Irradiation at the Kazakhstan Isochronous Cyclotron
19P07	A. Chaudhri (PCSIR)	Cyclotron Production of Ac-225 for Generating Bi-213 for Targeted Alpha Therapy (TAT)
19P08	K. Abbas (IHCP/JRC)	Alpha Emitter Radionuclides Production at the Joint Research Centre (JRC) of the European Commission
19P09	A. Chaudhri (PCSIR)	Production of Secondary Neutrons from Patients during Therapy with C-ions; their Dose Contributions and Potential Risks
19P10	A. Muminov (Uzbekistan Academy of Sciences)	Investigation of the Angle Distribution of Instant Gamma-radiation in a Bunch of Accelerated Particles on Cyclotron U-150
19P11	H. Takeichi (RIKEN)	Development of Gamma-rayY Emission Imaging
19P12	N. Ishioka (JAERI/TAKASAKI)	Extension of the Irradiation System at TIARA for Production of Radioisotopes to be used in Plant Physiology
19P13	T. Baba (NHV)	Design of a Compact FFAG Accelerator with Spiral Sector Magnet
19P14	Y. Arimoto (Osaka Univ.)	Design of Magnet for PRISM-FFAG
19P15	M. Rashid (DAE/VECC)	Cusped Mirror Magnetic Field for Electron Cyclotron Resonance Heavy Ion Source
19P16	R. Gebel (FZJ/COSY)	Negative Ion Sources at the Injector Cyclotron for the Cooler Synchrotron COSY/Juelich
19P17	Y. Miyashita (CYRIC)	A Compact 14.5 GHz ECR Ion Source at Tohoku University
19P18	M. Dehnel (DCL, Nelson)	Ion Source and Injection Systems for Industrial Cyclotrons
19P19	M. Leporis (JINR)	Design and Construction of the New Ion Source DECRIS-4
19P20	Y. Ohshiro (CNS)	Development of an ECRIon Source at CNS
19P21	F. Guan (CIAE)	H- Cusp source, Injection Line and Central Region for 100 MeV Compact Cyclotron at China Institute of Atomic Energy
19P22	B. Mukherjee (DESY)	A Radiological Safety and Health Physics Database for Cyclotrons Accelerating Protons and Deuterons up to 250 MeV

	19P23			T. Inomata (NCVC)	Neutron Reduction in the Small Cyclotron for Positron Emission Tomography
	19P24			H. Ryuto (RIKEN)	Rotating Carbon Disk Stripper for Intense Heavy-ion Beams
	19P25			H. Ryuto (RIKEN)	Charge Stripping Plan of the RIKEN RI-Beam Factory
	19P26			A. Papash (UAS/INR)	On Commecrcial Cyclotron of Intence Proton Beam of 30 MeV Energy Range
	19P27			****	****
	19P28			T. Honma (NIRS)	An Analytical Investigation of Time-dependant Discharge on Electrostatic Deflector at NIRS-930 Cyclotron
	19P29			I. Sugai (KEK)	Development of Long-lived Carbon Stripper Foils
	19P30			H. Hasebe (RIKEN)	Long-lived Carbon Stripper Foils for Intense Heavy-ion Beams
	19P31			D.Trbojevic (BNL)	Design of a Non-scaling FFAG Accelerator for Proton-Carbon Therapy
	19P32			M. Komiyama (RIKEN)	Control System for the RIKEN Accelerator Research Facility and RI-Beam Factory
16:05 - 18:10					Session 19C : FFAG Presiding: A. Sessler
	19C1	Invited	30	Y. Mori (KEK)	Development of FFAG Accelerators
	19C2	Invited	30	J. Berg (BNL)	Review of Current FFAG Lattice Studies in North America
	19C3	Invited	20	S. Koscielniak (TRIUMF)	Novel Constant-frequency Acceleration Technique for Non-scaling Muon FFAGs
	19C4	Contributed	15	M. Tanigaki (KURRI)	Construction of an FFAG Accelerator Complex for ADS Study
	19C5	Contributed	15	A. Sato (Osaka Univ.)	Design and Construction Status of an FFAG for the PRISM Project
	19C6	Contributed	15	H. Tanaka (Mitsubishi Electric Co.)	Hybrid Accelerator using an FFAG Injection Scheme

### Wendesday, October 20

Times	Code	Туре	min	Presenter	Title					
09:00 - 11:00		Session 20A : Status IV / Ion Sources II Presiding: S. Brandenburg								
	20A1	Invited	20	B. Gikal (JINR)	Dubna Cyclotrons - Status and Plans					
	20A2	Invited	20	J. Conradie (IThemba Labs)	Cyclotrons at iThemba LABS					
	20A3	Invited	20	W. Kleeven (IBA)	New Cyclotron Developments at IBA					
	20A4	Contributed	15	K. Hatanaka (RCNP)	Upgrade Project of the RCNP AVF Cyclotron					
	20A5	Contributed	15	D. Rifuggiato (INFN/LNS)	Ten Years Of Operation With The LNS Superconducting Cyclotron					
	20A6	Contributed	15	H. Zhao (IMP)	HIRFL Operation and Upgrade					
	20A7	Contributed	15	H. Koivisto (JYFL)	ECR Ion Source Plasma Related Research and Development Work at JYFL					
11:30 - 13:00				Session 20B : Magnet /	Facilities under construction II / Ion Sources III Presiding: P. Heikkinen					
	20B1	Invited	30	H. Okuno (RIKEN)	Magnets for the RIKEN Superconducting Ring Cyclotron					
	20B2	Contributed	15	M. Schippers (PSI)	The SC Cyclotron and Beam Lines of PSI's New Protontherapy Facility PROSCAN					
	20B3	Contributed	15	N. Neskovic (VINCA)	Fast Track Phase of Construction of the TESLA Accelerator Installation					
	20B4	Contributed	15	P. Miller (NSCL)	Design of SUSI - The New Superconducting ECR Ion Source at NSCL/MSU					
	20B5	Contributed	15	C. Bieth (PANTECHNIK)	PKDELIS An ECRIS Using High Temperature Superconducting Wire					
14:30 - 16:00				Poster session	20P : Beam Dynamics / Magnet / RF					
	20P01			A. Goswami (DAE/VECC)	Simulation Studies on Transverse Space Charge Effect in a High Current Compact Cyclotron					

20P02	N. Kazarinov (JINR)	Multi-component Ion Beam Code - MCIB-04
20P03	A. Papash (UAS/INR)	Field Shimming of commercial Cyclotrons
20P04	S. Brandenburg (KVI)	Vertical Beam Motion for High Energy Beams in the AGOR-Cyclotron
20P05	D. An (KIRAMS)	Beam Trajectory Simulations for the KIRAMS-13 Cyclotron
20P06	L. Stingelin (PSI)	Beam-Cavity Interaction Simulation for the PSI Ring-cyclotron
20P07	P. Belicev (VINCA)	Ion Beam Dynamics in the Central Region of the VINCY Cyclotron
20P08	J. Ristic-Djurovic (VINCA)	Foil Stripping Extraction Systems of the VINCY Cyclotron
20P09	C. Park (KIRAMS)	Beam Dynamics Study of High Intensity Compact Cyclotron for Neutron Generator at KIRAMS
20P10	I. Ivanenko (JINR)	Beam Injection and First Orbit for 2, 4 and 6 RF Harmonic Mode at the Central Region of DC-72 Cyclotron.
20P11	P. Sarma (DAE/VECC)	Coil Shape Optimization In Superconducting Dipole Magnets
20P12	T. Mitsumoto (SHI)	Construction of the fRC Sector Maget for RIKEN RI Beam Factory
20P13	T. Tominaka (RIKEN)	Helium Vapor-cooled Current Leads for the RIKEN SRC
20P14	S. Vorozhtsov (JINR)	Final Shaping of the Magnetic Structure of the VINCY Cyclotron
20P15	C. Chu (CIAE)	Main Magnet Structure Design and Mapping System for a 100 MeV H- Cyclotron
20P16	****	****
20P17	X. Wang (CIAE)	Preliminary Design of RF System for the 100MeV Cyclotron
20P18	T. Saito (RCNP)	The Flat-top System for the RCNP AVF Cyclotron
20P19	M. Watanabe (J-PARC)	A Broad-band RF Buncher Cavity using FINEMET Cut Cores for Ion Beams
20P20	T. Misu (NIRS)	Impedance Reduction of RF Cavity due to the Presence of Fringing Field
20P21	N. Sakamoto (RIKEN)	Construction of the RF-resonator for the RIKEN Superconducting Ring Cyclotron (SRC)
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	20P22			J. de Villiers (IThemba Labs)	A Flat-topping System for the Seperated Sector Cyclotron at iThemba LABS
	20P23			A. Caruso (INFN/LNS)	DDS-based Control Loops for the RF System at INFN-LNS
	20P24			O. Kamigaito (RIKEN)	Upgrade of RILAC Injector
	20P25			I. Jung (KIRAMS)	A Design of KIRAMS-13 RF System for Regional Cyclotron Center
	20P26			B. Bojovic (VINCA)	Slotted Line Power Testing of the Directly Coupled RF Amplifiers
	20P27			A. Caruso (INFN/LNS)	Chopper 500 Status Report
	20P28			S. Kurashima (JAERI/Takasaki)	Development of the Flat-Top Acceleration System for the JAERI AVF Cyclotron
	20P29			A. Mitra (TRIUMF)	Simulation of RF Structure of TRIUMF Cyclotron with HFSS
	20P30			A. Goto (RIKEN)	Status of the Flattop Acceleration System in the RIKEN AVF Cyclotron
	20P31			X. Zhou (IMP)	A New Rebuncher at the Beam Line From SFC to SSC For HIRFL
	20P32			W. Liu (IMP)	HIRFL-SSC Trim Coil Currents Calculation by Conjugate Gradients Method
16:05 - 18:05				Session 20C : RF /	Status V / Facilities under construction III Presiding: K. Sato
	20C1	Invited	30	P. Sigg (PSI)	Summary of the 3rd Workshop on High Power RF-systems for Accelerators
	20C2	Contributed	15	M. Maggiore (INFN/LNS)	Design of the RF System for a 250 A.MeV Superconducting Cyclotron
	20C3	Contributed	15	Y. Bylinskii (TRIUMF)	TRIUMF Cyclotron RF System Refurbishing
	20C4	Contributed	15	G. Ryckewaert (UCL CRC)	Status of the CYCLONE Facility
	20C5	Contributed	15	H. Homeyer (HMI)	ISL Status Report
	20C6	Contributed	15	P. Bertrand (GANIL)	Improvement of the Mass Separation Power of a Cyclotron by using the Vertical Selection Method
	20C7	Contributed	15	J. Kim (NCC)	Progress Report on the Proton Therapy Facility Project at National Cancer Center, Korea

### Thursday, October 21

Times	Code	Туре	min	Presenter	Title					
08:50 - 10:45		Session 21A : High Intensity Beam Dynamics / Beam Dynamics / Radioactive Ion Beam Facilities I Presiding: C. Lyneis								
	21A1	Invited	30	A. Adelmann (PSI)	Recent Results on Simulations of High Intensity Beams in Cyclotrons					
	21A2	Invited	20	F. Marti (NSCL)	Study of Space Charge Effects Using a Small Storage Ring that Works in the Isochronous Regime					
	21A3	Contributed	15	M. Schippers (PSI)	Results of 3D Beam Dynamics Studies in Distorted Fields of a 250 MeV Super-conducting Cyclotron					
	21A4	Invited	20	T. Zhang (CIAE)	100 MeV H- Cyclotron as an RIB Driving Accelerator					
	21A5	Contributed	15	M. Loiselet (UCL CRC)	The Development of a Be-7 Radioactive Beam: From Nuclear Physics to Applications for Industry					
	21A6	Contributed	15	D. Rifuggiato (INFN/LNS)	Status of the EXCYT Project					
11:10 - 12:30					m Technology / Beam Transport / Beam Diagnostics Presiding: R. Oganesyan					
	21B1	Invited	30	A. Mezger (PSI)	Control of a 1 MW Beam					
	21B2	Invited	20	M. Fukuda (JAERI/Takasaki)	Microbeam Production at JAERI AVF Cyclotron Facility					
	21B3	Contributed	15	J. Stetson (NSCL)	Comparison of Electrostatic and Magnetic Solenoid Focusing of Mixed Species Heavy Ion Beams at NSCL/MSU					
	21B4	Contributed	15	T. Watanabe (RIKEN)	Development of a Highly Sensitive Current and Position Monitor with an HTS SQUID and an HTS Magnetic Shield					

### Friday, October 22

Times	Code	Туре	min	Presenter	Title					
09:00 - 11:00		Session 22A : Radioactive Ion Beam Facilities II Presiding: G. Ryckewaert								
	22A1	Invited	30	G. Bollen (NSCL)	Radioactive Beam Facilities in USA: Current Status and Future					
	22A2	Invited	30	J. Cornell (GANIL)	Radioactive Ion Beam Facilities in Europe: Current Status and Future Development					
	22A3	Invited	30	M. Moscatello (GANIL)	GANIL SPIRAL2					
	22A4	Invited	30	P. Schmor (TRIUMF)	TRIUMF ISAC-II and Beyond					
11:30 - 12:30		Session 22B : History / Conference Summary Presiding: L. Calabretta								
	22B1	Invited	30	H. Blosser (NSCL)	30 Years of Superconducting Cyclotron Technology					
	22B2	Invited	30	M. Craddock (UBC & TRIUMF)	Conference Summary					