

**Monday, 10<sup>th</sup> September 2018**  
(Diocesan Museum)

**OPENING SESSION: 9:00 – 9:30**

Welcome of INFN-LNS Director: Giacomo Cuttone

**MORNING ORAL SESSION: 9:30 – 10:50**

Chair: S. Gammino

Status reports and new developments

H. Zhao (23'+7') - Development and status of 45 GHz

FECR D. Xie (23'+7') - Exploring the potential of VENUS ion source

H. Koivisto (15'+5') - First Ion Beams Extracted from a New JYFL 18GHz Ecris: HIISI

**MORNING ORAL SESSION: 11:10 – 12:30**

Chair: H. Zhao

Status reports and new developments, Applications

V. Skalyga (15'+5') - Status of a New 28 GHz Gasdynamic Ion Source for Multipurpose Operation (GISMO) Development at the IAP RAS

N. Gambino (15'+5') - Status of the carbon ion source commissioning at MedAustron

D. Mascali (15'+5') - Characterization of the AISHA Ion Source

P. Salou (15'+5') - Positive Ion Mass Spectrometry: A Novel Technique of Accelerator Mass Spectrometry Using Ecris

**AFTERNOON ORAL SESSION: 14:30 – 16:**

Chair: R. Vondrasek

Charge Breeding

T. Thuiller (15'+5') - Challenges and Prospects of ECR Charge Breeding

D. May (15'+5') - Charge-Breeding of Radioactive Ions at the Texas A&M Cyclotron Institute

J. Angot (15'+5') - Charge breeding time studies with short pulse beam injection

L. Manoury (15'+5') - SPIRAL1 charge breeder: performances and status

A. Annaluru (15'+5') -  $1+/n+$  method: numerical simulation studies and experimental measurements on the SPIRAL1 charge breeder

V. Toivanen (15'+5') - Redesign of the GANIL GTS ECRIS for  $1+/n+$  Studies

**ROUND TABLE: 16:50 – 18:15**

Chair: D. Leitner

Future Magnetic systems for ECRIS

**Tuesday, 11<sup>th</sup> September 2018**  
(Diocesan Museum)

**MORNING ORAL SESSION: 9:00 – 10:50**

Chair: D. Xie

Status reports and new developments

T. Nakagawa (23'+7') - Optimization of RIKEN SC-ECRIS performance for production of intense metal ion beam

A. Kitagawa (15'+5') - Present Status and Future Prospect of Heavy Ion Radiotherapy

T. Nagatomo (15'+5') - New 28-GHz Superconducting Ecr Ion Source for Synthesizing New Super Heavy Elements of  $Z > 118$

G. Machicoane (15'+5') - FRIB 28 GHz ECR ion source construction progress and commissioning status

L. Sun (15'+5') - High Power Operation with SECRAL-II Ion Source

**MORNING ORAL SESSION: 11:10 – 12:30**

Chair: T. Nakagawa

Plasma physics and techniques

J. Guo (15'+5') - Perspective on High-Power Microwave Coupling in Gyrotron Frequency ECR Ion Sources

G. Torrisi (15'+5') - Plasma Heating and Innovative Microwave Launching in ECRIS: Models and Experiments

C. Gallo (15'+5') - A Possible Optimization of Electron Cyclotron Resonance Ion Sources Plasma Chambers

R. Mitchel (15'+5') - Manufacture of a 7.5 M Long Cryogen-Free Magnet System for Neutron Decay Studies

**GELLER PRIZE SESSION: 14:30 – 15:20**

Chair: Mi-Sook Won

Co-Chair: G. Gaubert

**POSTER SESSION: 15:20 – 16:50**

**ROUND TABLE: 16:50 – 18:15**

Chair: H. Koivisto

Future of ECRIS, beyond the scaling laws?

**Wednesday, 12<sup>th</sup> September 2018**  
**(Diocesan Museum)**

**MORNING ORAL SESSION: 9:00 – 10:50**

Chair: D. Mascali  
Plasma Investigations

- I. Izotov (23'+7') - The Energy Distribution of Electrons Escaping Minimum-B ECR Plasma in Unstable Mode
- J. Li (15'+5') - Bremsstrahlung Measurements with SECRAL II Ion Source
- B. Isherwood (15'+5') - Plasma Instability Studies of the SuSI 18 Ghz Source
- G. Castro (15'+5') - OES and other diagnostics for the ESS Proton Source
- R. Rácz (15'+5') - Effect of the two-close-frequency heating to the extracted ion beam and to the X-ray flux emitted by the ECR plasma

**MORNING ORAL SESSION: 11:10 – 12:30**

Chair: T. Thuiller  
Plasma physics and Techniques

- V. Mironov (15'+5') - Simulations of ECRIS Performance for Different Working Materials
- A. Leduc (15'+5') - Ca production and strategy with the Phoenix V3 ECR ion source
- W. Lu (15'+5') - High temperature oven development for intense metal beam production at IMP
- J. Ohnishi (15'+5') - Practical Use of High-Temperature Oven for 28 GHz Superconducting ECR Ion Source at RIKEN

**LIGHT LUNCH: 12:30 – 14:30**

**CONFERENCE OUTING: 14:30 – 16:30**

**Thursday, 13<sup>th</sup> September 2018**  
**(Diocesan Museum)**

**MORNING ORAL SESSION: 9:00 – 10:50**

Chair: G. Machicoane  
High current ion sources

- L. Neri (23'+7') - High intensity proton source and LEBT for the European Spallation Source
- S.V. Golubev (15'+5')- Point-like Neutron Emission Observation Using a Neutron Generator Based on a Gasdynamic ECR Ion Source
- A. Miraglia (15'+5')- Strategic Management for Delivery and Installation of Ion Source and Low Energy Beam Transport for ESS Project
- C. Qian (15'+5')- Development of LECR4 ion source for intense beam production and LECR5 for SESRI Project
- R. Lapin (15'+5') - Gasdynamic ECR Tandem Ion Source for Negative Hydrogen Ion Production

**ROUND TABLE: 11:10 – 12:30**

Chair: P. Spaedtke  
Extraction and transport of intense ion beams

**AFTERNOON ORAL SESSION: 14:30 – 16:30**

Chair: V. Skalyga  
High current ion sources

- Q. Wu (15'+5')- Development of 2.45 GHz ECR ion source at IMP
- S. Vala (15'+5')- Development of test bench of 2.45 GHz ECR ion source for RFQ accelerator
- Y. Iwashita (15'+5')- Compact High current H<sup>+</sup> ECR Ion Source with Fast Pulse Gas Valve
- S.. Bogomolov (15'+5') - Development of Compact 2.45 GHz ECR Ion Source for Generation of Singly-Charged Ions

**POSTER SESSION: 15:50 – 17:30**

**CONFERENCE BANQUET: 20:00 – 22:30**

**Friday, 14<sup>th</sup> September 2018**  
**(INFN-LNS)**

**TRANSFER TO INFN-LNS: 9:00 – 9:30**

**MORNING ORAL SESSION: 9:30 – 10:50**

Plasma Investigations  
Chair: K. Tinschert

- R. Kronholm (23'+7')- High Resolution Spectrometer Development for Ecris Plasma Spectroscopy
- D. Todd (15'+5')- Simulation and experimental studies of biased disc behavior in the superconducting ECR ion source VENUS
- M. Giarrusso (15'+5') - High Resolution Spectropolarimetry: from Astrophysics to ECR plasmas

**MORNING ORAL SESSION: 11:10 – 12:00**

Plasma Investigations  
Chair: S. Biri

- J. Benitez (15'+5') - Axial X-Ray Cutoff in Small, Dense Plasma in the VENUS ECR
- E. Naselli (15'+5') - Impact of the two close frequency heating on ECRIS plasmas stability

**CLOSING REMARKS: 12:00 – 12:30**

A. Kitagawa

**LIGHT LUNCH: 12:30 – 14:30**

**TOUR OF INFN-LNS: 14:30 – 16:30**

**TRANSFER TO HOTEL: 16:30 16:50**