

17th International Conference on Ion Sources



Sunday 15 October 2017 - Friday 20 October 2017

CERN

Scientific Programme

Fundamental processes

****Monday 16 October** 16:00-16:20** S. Gammino-IFN-***Commissioning of the AISHA (Advanced Ion Source for Hadrontherapy) Ion Source****
****Tuesday 17 October** 08:30-09:00** M. Wada-DOSHISHA UNIV.-***Plasma-surface interaction in negative hydrogen ion sources****
09:00-09:30 K. Tsumori-NIFS-***Flow patterns of H⁻ ions measured with Directional Photodetachment Langmuir Probe****
09:30-09:50 G.Castro-INFN-LNS-***Plasma diagnostics update and consequences on the upgrade of existing sources****
09:50-10:10 J. Laulainen-JYVASKYLA UNIV.-***Photoelectron Emission Induced by Low Temperature Hydrogen Plasmas****
15:40-16:00 F. Taccogna-CNR-***Particle-based model of plasmadynamics in ITER-prototype negative ion source****

Negative ion sources

****Monday 16 October** 15:00-15:20** S. Briefli-AUGSBURG-UNIV.-***Experimental benchmark of the EM-PIC-MCC code NINJA and its application for simulating the Linac4 H⁺ ion source plasma****
15:20-15:40 R. Welton-ORNL-***Status of the New SNS Injector and External Antenna Ion Source****
****Wednesday 18 October** 15:00-15:20** A. Garcia Sosa-FNAL-***Implementation of Design Changes Towards a More Reliable, Hands-off Magnetron Ion Source****
15:40-16:00 A.Zelenski-BNL-***The RHIC polarized H⁻ ion source****

Radioactive ion beams, charge breeders and polarized beams

****Tuesday 17 October** 14:00-14:30** R. Vondrasek-ANL-***Charge Breeding of Radioactive Isotopes at the CARIBU Facility****

Beam extraction, transport, and diagnostics

****Tuesday 17 October** 11:00-11:30** D. Wunderlich-IPP Garching-***Review of PIC modelling for the extraction region of large negative hydrogen ion sources****
11:30-11:50 Y. Belchenko-BINP-***RF driven Multiaperture Surface-Plasma Negative Ion Source: Beam Formation and Transport via the LEBT****
11:50-12:10 E. Sartori-PADOVA UNIV.-***First measurements of beam plasma in NIFS test stand****
****Wednesday 18 October** 10:10-10:30** S. Ikeda-BNL-***Investigation of laser energy absorption by ablation plasmas****
14:30-15:00 T. Kalvas-JYVASKYLA UNIV.-***New challenges in ion beam extraction modelling****
15:20-15:40 T. Nagatomo-RIKEN-***Residual Gas Effect in LEBT on Transverse Emittance of Multiply-Charged Heavy Ion Beams Extracted from ECR Ion Source****

Production of high intensity ion beams

****Wednesday 18 October** 08:30-09:00** S. Steinke-LBNL-***Direct laser ionization and acceleration using PW lasers****
09:00-09:30 Y. Zhao-IMP-***Superconducting ECR ion source: from 24-28 GHz SECRA to 45 GHz FECR****
09:50-10:10 L. Celona-INFN-LNS-***High intensity proton source and LEBT for the European Spallation Source****

Production of highly charged ion beams

****Monday 16 October**** ****11:00-11:30**** T.Thuillier-CNRS**-"Prospect for a multicharged ECR ion source operated at 60 GHz"****** ****11:30-11:50**** E. Beebe-BNL**-"The Extended EBIS Intensity Upgrade at Brookhaven National Laboratory"****** ****11:50-12:10**** E. Donets-JINR**-"Status report on development and commissioning of new Electron String Ion Source (ESIS) Krion-6T."****** ****12:10-12:30**** D.Xie-LBNL**-"Recent Production of Ultra-High Charge State Ion Beams with VENUS"****** ****Wednesday 18 October**** ****14:00-14:30**** A. Adonin-GSI-***"Progress on the MEVVA source VARIS at GSI"****** ****14:30-15:00**** O. Tuske-CEA SACLAY-***"Commissioning of the ECR Ion Source of the High Intensity Proton Injector of the Facility for Anti Proton and Ion Research at CEA-Saclay"******

Applications and related technologies

****Tuesday 17 October**** ****10:10-10:30**** J.Guo-IMP-CAS-***"45 GHz microwave power transmission and coupling scheme study with superconducting ECR ion source at IMP"****** ****Wednesday 18 October**** ****11:30-11:50**** A. Kitagawa-QST-***"Status of ion sources at The National Institutes for Quantum and Radiological Science and Technology (QST)"****** ****11:50-12:10**** T. Stora-CERN-***"Ion sources for medical radioisotopes produced by electromagnetic mass separation at CERN-MEDICIS"****** ****12:10-12:30**** K. Rittenhouse-PNL-***"Industrial Applications of ECR-Based Neutron Generators"****** ****Thursday 19 October**** ****08:30-09:00**** A. Pikin-BNL**-"Generation of magneto-immersed electron beams"****** ****09:00-09:20**** J. van Kan-Physics NUS-***"Design optimization of the nano-aperture ion source for proton beam writing applications"******

Ion sources for fusion

****Monday 16 October**** ****9:10 - 9:30**** W. Kraus-IPP**-"Deuterium results at ELISE"****** ****9:40 - 10:10**** M. Kashiwagi-QST**-"Achievement of 1 MeV beam accelerations for 60 s toward high power NBIs"****** ****10:10 - 10:30**** A. Simonin - CEA **-"Ongoing R&D; towards a new generation of neutral beam heating systems for future fusion reactors"****** ****Tuesday 17 October**** ****12:10-12:30**** K.Ikeda-NIFS-***"First Results of Deuterium Beam Operation on Neutral Beam Injectors in the Large Helical Device"****** ****15:00-15:20**** U. Fantz-IPP-***"Improved Understanding of the Caesium Dynamics in Large H Sources by Combining TDLAS Measurements and Modelling"****** ****15:20-15:40**** R. Agnello-EPFL-***"The RAID experiment for the investigation of negative ion physics for fusion applications"******