

Meeting NIS4PIC

Progress on Particle-based Models for Negative Ion Sources

2017 March 1st

CNR-Research Area Bari

via Amendola 122/D Bari

Access A, Meeting room – 5th floor

Program

Time	Speaker	Title	Session
09:00 – 09:20	Jacques Lettry CERN	Measurement available on H- and D- beams	Benchmark with experiments
09:20 – 09:40	Pierluigi Veltri INFN	Comparison of PIC model vs probe measurements in the NIO1 source plasma volume	
09:40 – 10:00	Roberto Celiberto PoliBA	Electron-induced cross sections for H ₂ and D ₂	Input database for PIC
10:00 – 10:20	Maria Rutigliano CNR-Nanotec	Hydrogen scattering from Caesiated surface model: preliminary results	
10:20 – 10:40	Savino Longo UniBA	Molecular dynamics of Cs atoms and Cs monolayer on Mo001 surface	
10:40 – 11:00 Coffe break			
11:00 – 11:30	Gwenael Fubiani CNRS-LAPLACE	Extraction of negative ions, scaling laws and onset of the aberrations: insight from lower density calculations	Extraction models
11:30 – 12:00	Dirk Wunderlich IPP-MPG	Pseudo 1D model	
12:00 – 12:30	Emanuele Sartori RFX	First results of 3D extraction PIC model with GPU	
12:30 – 15:00 Lunch			
15:00 – 15:30	Adrien Revel IPP-MPG	Latest results of ONIX	Full source models
15:30 – 16:00	Shu Nishioka Keio University	Latest results on 3D extraction PIC model	
16:00 – 16:30	Stefano Mattei EPFL	Plasma heating code NINJA	
16:30 – 17:00 Coffe break			
17:00 – 17:30	Gwenael Fubiani CNRS-LAPLACE	Extraction of negative ions versus the bias voltage and beamlet asymmetry: model of the entire ion source in 2D	Full source models
17:30 – 18:00	Francesco Taccogna CNR-Nanotec	2.5D full source model MINUS: first results	
18:00 – 18:30	All	Discussion on future works	