

Physics Cases and Instrumentation for the EURISOL-DF, next step towards Eurisol



Wednesday 15 November 2017 - Thursday 16 November 2017

Instituto Superior Técnico, Universidade de Lisboa

Scientific Programme

"Physics Cases and Instrumentation for EURISOL- DF,the next step towards EURISOL"

Topics of discussion:

I - "The formation and structure of r-process nuclei"

II - "Physics of Light Exotic Nuclei"

III - "Physics and astrophysics of neutron deficient nuclei"

IV - "Probing fundamental symmetries and interactions with RIBs"

V - "Going to the limits of mass, temperature, spin and isospin with heavy Radioactive Ion Beams"

VI - "Innovative Instrumentation for EURISOL-DF"

Wednesday, 15th November 2017

8:30 - Registration

9:00 – Welcome – Prof. Pedro Sebastião (CeFEMA/IST, Lisbon)

9:15 - Yorick Blumenfeld (IPN, Orsay) - "Introduction to EURISOL"

9:30 - Marek Lewitowicz (GANIL, Caen) - "The EURISOL-Distributed Facility Initiative "

10:00 -Anu Kankainen (JYFL, Jyväskylä) - "The formation and structure of r-process nuclei"– Topic I

10:30 -11:00 coffee break

11:00 - Olivier Sorlin (GANIL, Caen) - "Experiments studies related to i and r process nucleosynthesis" - Topic I

11:30 - Marius Eichler (TU, Darmstadt) - "The (hot) r-process scenario: from reaction equilibria to kilonovae" - Topic I

12:00 – Maria José Borge(CERN, Geneve) - "Light nuclei, challenges and experimental tools"-Topic II

12:30 - 14:00 lunch

14:00 – Alessia di Pietro (LNS, Catania) -"Physics with light exotic beams"- Topic II

14:30 – David Joss (University of Liverpool)- "Structure of heavy neutron-deficient nuclei near the proton drip line" - Topic III

15:00 - David Jenkins (University of York) - "Probing isospin non-conserving forces in nuclei through studies of isospin triplets " - Topic III

15:30 - 15:50 coffee break

15:50 – Emmanuel Clement (GANIL, Caen) - "Physics and astrophysics of neutron deficient nuclei" - Topic III

16:20 - Tommi Eronen (JYFL, Jyväskylä) - "Probing fundamental symmetries and interactions with RIBS" - Topic IV

16:50 -17:30 Poster presentations

17:30 – 18:30 Poster session

Poster presentations

16:50 - Igor Cherednikov, Lars Ghys, Lucia-Ana Popescu, BriX Collaboration -
“Identified applications of the ISOL@MYRRHA facility in phase 1”- Topic II

16:55 - Daniel Galaviz Redondo - “Alpha-elastic scattering in inverse kinematics for the
astrophysical p-process “ - Topic III

17:00 - P. Arumugam , L. S. Ferreira, E. Maglione, P. Ring - “Microscopic description of proton
emitters” - Topic III

17:05 - Ricardo Augusto, CERN-MEDICIS Collaboration - “CERN-MEDICIS, an overview” -Topic IV

17:10 - Giovanni Casini - “Nuclear fragment production and identification at Fermi energies”- Topic
V

17:15 - M. Ciemała, A. Maj, P. Bednarczyk, M. Kmiecik, B. Wasilewska, M. Ziębliński, S. Brambilla,
F. Camera, A. Mentana, I. Matea, O. Dorvaux, S. Kihel, O. Stezowski, Ch. Schmitt, I. Mazumdar, V.
Nanal, C. Gosh, D. Jenkins, P. Napiorkowski, - “PARIS - Photon Array for Studies with Rad-
ioactive Ion and Stable beams” - Topic VI

17:20 - Julien ANGOT, Thomas Thuillier, Maud Baylac, Josua JACOB, Laurent BONNY, Patrick
SOLE, Thierry Lamy - “Status and future prospects of the PHOENIX ECR Charge Breeder” - Topic
VI

17:25 - Jose Pedro Miragaia Trancoso Vaz, Raul Luís, Yuriy Romanets, “The EURISOL facility –
radiation protection and radiation shielding issues - A review” - Topic VI

Thursday, 16th November 2017

9:00 - David Verney (IPN, Orsay) - “Spectroscopy investigation of the 78Ni region: Potential
avenues for a joint effort within EURISOL-DF” - Topic V

9:30 - Bogdan Fornal (Inst. Nucl. Physics, Krakow) - “ Search for shape isomers by using
sub-barrier transfer reactions with radioactive beams” - Topic V

10:00 - Giuseppe Verde (INFN,Catania) - “Dynamical aspects of nuclear structure under extreme
conditions” - Topic V

10:30 -11:00 coffee break

11:00 - Franco Camera (Università di Milano) - “Instrumentation Physics Cases for EURISOL-DF,

the next step towards EURISOL” - Topic VI

11:30 - Daniel Cano Ott (CIEMAT, Madrid) - “Neutron detectors for new physics opportunities”
- Topic VI

12:00 - Didier Beaumel (IPN, Orsay) - “New detection systems for direct reaction studies in Europe”
- Topic VI

12:30- 14:00 lunch

14:00 - 15:00 Panel Discussion Topics I and III

Rapporteurs: Luis Fraile (Complutense Univ., Madrid), Robert Page (Univ. of Liverpool), Iain Moore (Univ. Jyväskylä)

15:00 - 16:15 Panel Discussion Topics II, IV and V

Rapporteurs: Berta Rubio (IFIC, Valencia), N. Alamanos (CEA/IRFU, Saclay), Adam May (Inst. Nucl. Phys., Kraków), A. Jungclaus (CSIC, Madrid).

16:15 - 16:45 coffee break

16:45 - 17:45 Panel Discussion Topic VI

Rapporteurs: Riccardo Raabe (KU, Leuven), Iain Moore (Univ. Jyväskylä), Angelo Pagano (INFN/LNS, Catania), Fadi Ibrahim (IPN, Orsay), Pedro Vaz (CTN/IST, Lisbon)

17:45 – 18:15 Conclusions

Gerda Neyens (CERN)

18:15 - Closing Berta Rubio (IFIC. Valencia)