



Programme

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

Instituto Superior Técnico, University of Lisbon,

15th -16th of November, 2017.

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"

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Wednesday, 15th November 2017

8:30 - Registration

9:00 – Welcome – Pedro Sebastião (President of CeFEMA/IST, Lisbon)

9:15 - Yorick Blumenfeld (IPN, Orsay) “ **Introduction to EURISOL**”

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

Chair: Lúcia Ferreira (CeFEMA/IST, Lisbon)

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

Chair: Luis Fraile (Complutense University, Madrid)

10:30 -11:00 coffee break

11:00 - Olivier Sorlin (GANIL, Caen) “**Experimentals studies related to the 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*

Chair: Luis Fraile (Complutense University, Madrid)

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

Chair: Angela Bonaccorso

12:30 - 14:00 lunch

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

Chair: Nicolas Alamanos (CEA/IRFU, Saclay)

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*

Chair: Robert Page (University of Liverpool)

15:30 - 15:50 coffee break

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

Chair: Robert Page (University of Liverpool)

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

Chair: Adam Maj (Inst. Nucl. Phys, Kraków)

16:50 -17:30 Poster presentations

Chair: Iain Moore (Univ. Jyvaskyla, Finland)

17:30 – 18:30 Poster session

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Poster presentations

16:50 - Igor Cherednikov, Lars Ghys, Lucia-Ana Popescu, BriX Collaboration

"Identified applications of the ISOL@MYRRHA facility in phase 1"- *Topic III*

16:55 - Daniel Galaviz Redondo, "Alpha-elastic scattering in inverse kinematics for the astrophysical p-process " - *Topic II*

17:00 - P. Arumugam , L. S. Ferreira, E. Maglione, P. Ring, "Microscopic description of proton emitters" - *Topic II*

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. Ciemala, 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*

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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 (IPN, Orsay) "**Dynamical aspects of nuclear structure under extreme conditions**" - *Topic V*

Chair: Andrea Jungclaus (CSIC, Madrid)

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*

Chair: Riccardo Raabe (KU, Leuven)

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, Finland).

Chair: Ari Jokinen (Univ. Jyväskylä, Finland)

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

Rapporteurs: Berta Rubio (IFIC, Valencia), Nicolas Alamanos (CEA/IRFU, Saclay), Adam May (Inst. Nucl. Phys., Kraków), Andrea Jungclaus (CSIC, Madrid), Iain Moore (Univ. Jyväskylä, Finland).

Chair: Yorick Blumenfeld (IPN, Orsay)

16:15 - 16:45 coffee break

16:45 - 17:45 Panel Discussion **Topic VI**

Rapporteurs: Riccardo Raabe (KU, Leuven), Iain Moore (Univ. Jyväskylä, Finland).

Angelo Pagano (INFN/LNS, Catania), Pedro Vaz (CTN/IST, Lisbon), Fadi Ibrahim (IPN, Orsay).

Chair: Marek Lewitowicz (GANIL, Caen)

17:45 – 18:15 Conclusions

Gerda Neyens (CERN)

Chair: Berta Rubio (IFIC, Valencia)

18:15 - Closing