



EURISOL-DF: an update (Distributed Facility)

7th of November, 2017

Gerda Neyens



EURISOL SC meeting, Nov. 17, 2017

Kick-off meeting for DF-working group leaders



Participants:

- BEC: Lucia Popescu, Riccardo Raabe
- CERN: Gerda Neyens
- COPIN: Adam Maj
- CSIC: Maria Borge
- ENSAR2 (JRA EURISOL): Yorick Blumenfeld
- EURISOL User Group: Berta Rubio
- GANIL: Marek Lewitowicz(Chair), Ketel Turzó
- INFN: Sara Pirrone
- JYU: Ari Jokinen



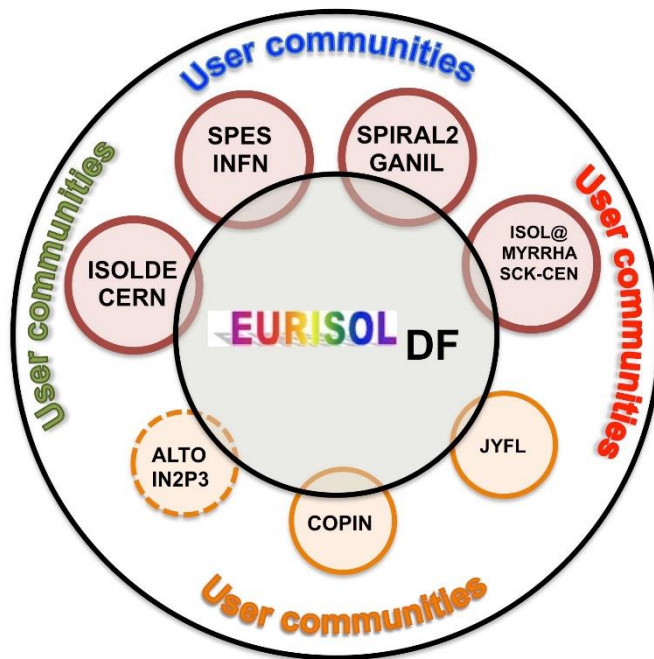
Not present: Angela Bracco, Hervé Savajols

EURISOL-DF Working group reports

- ***WG1 – Science and applications (Riccardo Raabe)***
 - ***WG2 – high power accelerator (Alberto ..)***
 - ***WG3 – beam handling, targets and ion sources (Maria Borge)***
 - ***WG4 – spectrometers and detectors (Hervé Savajols)***
 - ***WG5 – EURISOL-DF relationships and legal structure (Angela Bracco / Marek L.)***
- Reports to be ready by end of March 2018

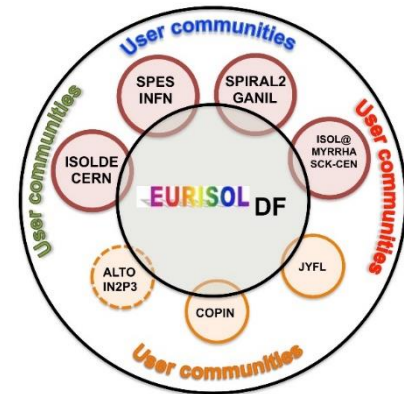
EURISOL – Distributed Facility (DF) Initiative

*M. Lewitowicz
for the EURISOL Steering Committee*



- The next step on the way to the **EURISOL** facility
- The way to get EURISOL **back into** the **ESFRI** list

EURISOL – Distributed Facility (DF)



Core members :
HIE-ISOLDE/CERN
SPES-INFN
SPIRAL2-GANIL
ISOL@MYRRHA-SCK*CEN

Associated Members
JYFL, Finland
COPIN Consortium, Poland
(ALTO, Orsay)

The goals of EURISOL-DF project (1/2)

- Implement a **new scientific policy** tackling major problems in nuclear physics at ISOL-based European facilities and in particular:
 - organise **experimental campaigns** using all available observables, techniques, facilities and theoretical approaches to answer key questions in nuclear structure (eg. modifications of magic numbers in nuclei far from stability) and astrophysics (eg. genesis of middle to heavy mass elements in the Universe) ;
 - have a single entry point for a **significant fraction (up to 50%) of the Radioactive Ion beamtime** dedicated at ISOLDE-CERN, SPIRAL2-GANIL & SPES-INFN for the EURISOL-DF experiments and distributed via the EURISOL-DF Program Advisory Committee;
- Develop **R&D on RIB production and instrumentation** towards EURISOL and in particular:
 - organise and open to all EURISOL-DF members the R&D platforms to develop RIB (ex. ion sources, targets, separation techniques) and detector systems;

The goals of EURISOL-DF project (2/2)

- Promote **user driven policy** with an important role played by the EURISOL User Group and the EURISOL Instrumentation Coordination Committee in order to organise and optimize the campaigns of travelling detectors and arrays;
- Have **EURISOL-DF included on the ESFRI list by 2020** and attract additional member states and EU funds, in particular:
 - in-kind and/or cash contributions of the members for joint developments for EURISOL in the domains of accelerators, RIB production and instrumentation for experiments;
- Establish a **joint strategy in education and training in nuclear science** (eg. organising joint summer schools, hands on training, topical workshops and conferences);
- Develop **EURISOL as a single site facility as a long-term goal.**

EURISOL – Distributed Facility (DF) Initiative – next steps

- First draft of the **full EURISOL-DF proposal** including the WG reports, feed-back from the Lisbon conference, NuPECC LRP recommendations by **May 2018**
 - *Writing Committee (B. Rubio, Y. Blumenfeld and M. L.) in a close collaboration with the EURISOL Steering Committee and EURISOL UEC*
- Lobbying and **green light from at least 3 countries** by November 2018
- Draft of the **full EURISOL-DF proposal by January 2019**
- Consultation of the draft with the involved countries and community with an involvement of the EURISOL User Executive Committee: March-July 2019
- **Submission of the EURISOL-DF project to ESFRI by July-August 2019 (dead-line August 31st)**

2018

2019

2020

2021

2022

EURISOL
DF

ESFRI roadmap
proposal preparation

Submis
sion
August

ESFRI
decisi
on

If OK from ESFRI
EURISOL-DF EU funded
Preparatory Phase

EURISOL DF

Preparation of the EURISOL-DF application to enter ESFRI in 2020 (Marek, Berta, Yorick)

Request: it is very important to know what each infrastructure wants to put in EURISOL-DF as upgrade of its facilities, in terms of equipment and costs, for two different periods:

- Preparatory phase: 2021-2023
- Intensity upgrade ?
- Following period: 2024-2028
- Storage Ring ?

Volunteers to join the writing group: persons from Italy (Angela Bracco) and from ISOLDE community ?

Starting from May 2018: discussions with lab directors, funding agencies, and users. All the steering committee should be involved. The actions and agenda will be discussed in the next meetings (first one: during EURORIB Conference, May 2018).

