



# Discussion on the Status of the ENSAR2 JRA2 – PSeGe

**A.Gadea (IFIC-Valencia) for the PSeGe Collaboration**

**3rd Position Sensitive Germanium Detectors and application Workshop  
10th – 14th September 2018, IPHC, Strasbourg**



# Discussion on ENSAR -NEXT

- the preparation phase for the continuation of ENSAR, called ENSAR NEXT has started. The new Integrated Activity application has to be submitted on March 2019 as follow up of ENSAR2.
- ENSAR-NEXT Coordinator A.Bracco (INFN and Uni. Milano)
- Timeline:
  - presentation of ideas in a preparatory meeting to be held in Catania the 6th of October 2018.
  - Within the registration deadline (29th of September) a very preliminary draft of the proposal has to be submitted.
  - Full proposal draft should be ready for 28th October 2018.
- the budget limitation –present already in the last call- suggest that the proposal is expected to contain about 6-8 NAs and 5-7 JRAs.
- Strong case to have a continuation of PSeGe.

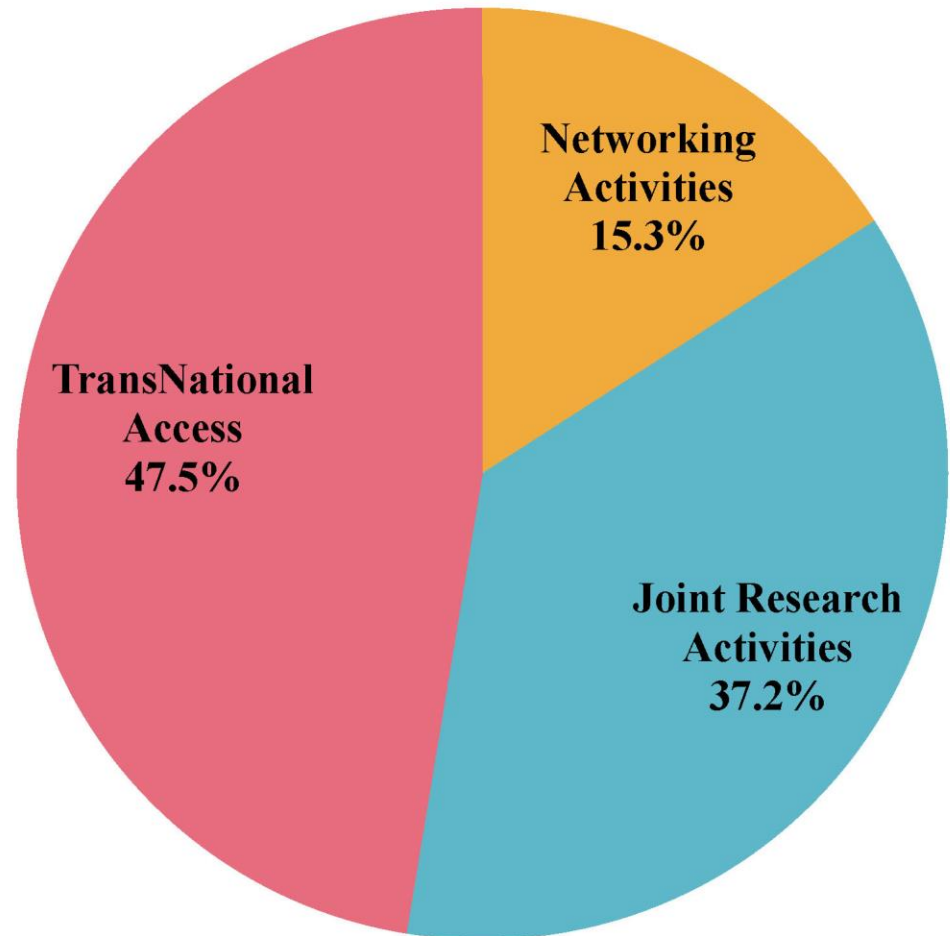


## BUDGET

Total budget for ENSAR2: 10 000 000 €  
to share between 30 beneficiaries

Pre-financing: 3 250 000 €

Next funding: after validation  
of each periodic report



**Muhsin N. Harakeh**

**Muhsin N. Harakeh**

ENSAR

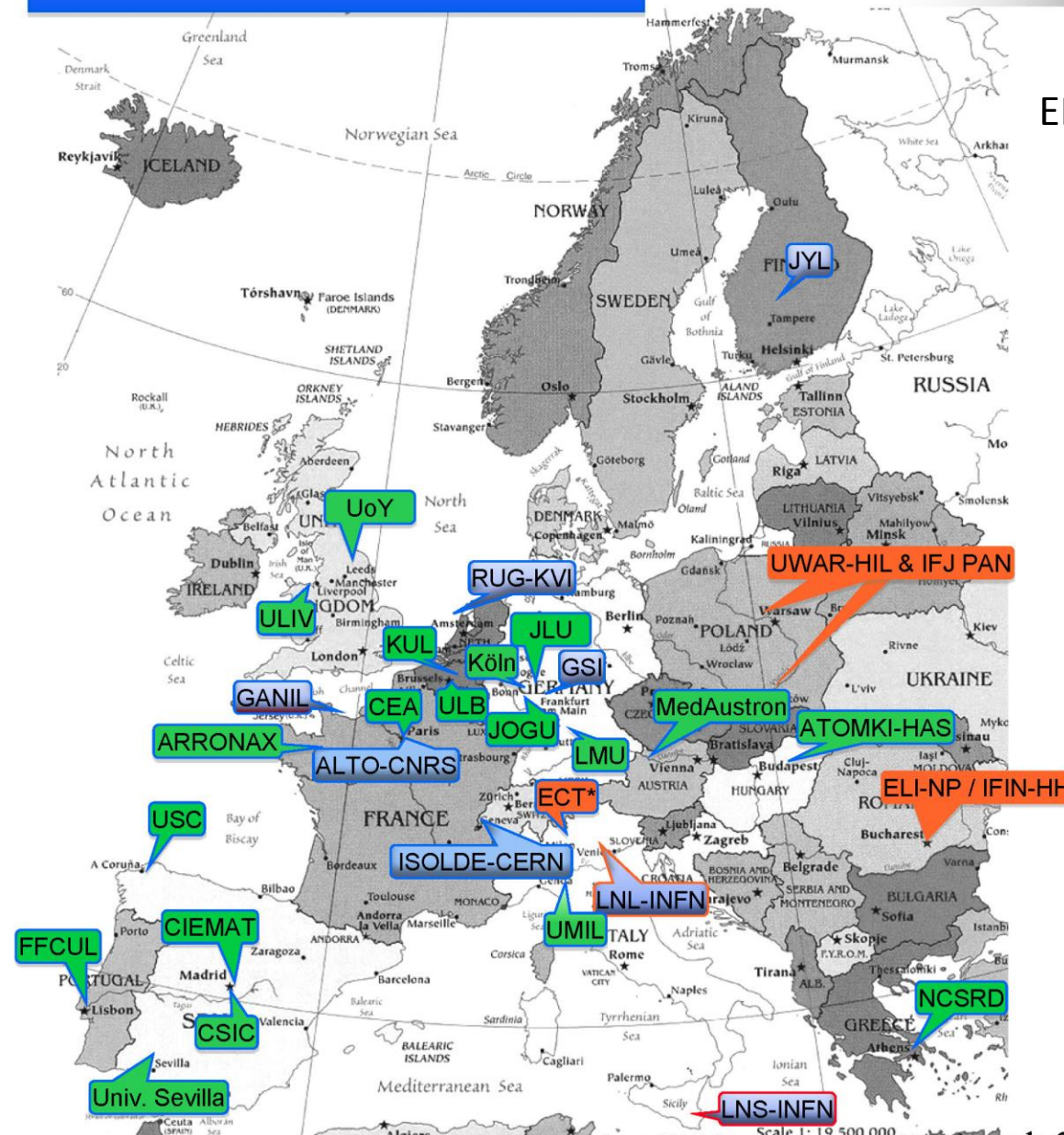
ENSAR2

**7  $\Rightarrow$  10 TNA Facilities**

**30  $\Rightarrow$  30 beneficiaries**  
**15 countries**

**Community: 2700-3000**  
**scientists and highly qualified**  
**engineers**

**Close collaboration with**  
**infrastructures outside Europe:**  
**Canada: TRIUMF**  
**China: IMP Lanzhou**  
**Japan: RIKEN & RCNP**  
**Russia: Dubna/JINR**  
**South Africa: iThemba**  
**United States: NSCL & ANL**





## TNAs

- **GANIL-SPIRAL2 (France)**
- **LNL-LNS (INFN, Italy)**
- **ISOLDE (CERN, Switzerland)**
- **JYFL (Finland)**
- **ALTO (CNRS, France)**
- **GSI (Germany)**
- **KVI-CART (The Netherlands)**
- **NLC (HIL/IFJ PAN, Poland)**
- **IFIN-HH/ELI-NP (Romania)**
- **ECT\* (Italy)**

**NEW  
NEW  
NEW**

**Muhsin N. Harakeh**

# NAs



**The Networking Activities have been set-up with specific actions to strengthen the community work in TNAs and JRAs.**

➤ **FISCO2: Financial and Scientific Coordination 2**

**Ketel Turzó**

➤ **NuSPRA(SEN): Nuclear Structure Physics, Reactions and Astrophysics (and Superheavy Elements Network)**

**Christoph Scheidenberger**

➤ **MIDAS: ECR ion sources**

**Hannu Koivisto**

**Muhsin N. Harakeh**

➤ **NUSPIN: Nuclear Spectroscopy Instrumentation**

**Silvia Lenzi**

➤ **MediNet (ASTARTE+ Ion-Beam Therapy)**

**Peter Thirolf & Giulio Magrin**

➤ **GDS: Active targets (TPC gaseous detectors)**

**Geoff Grinyer**

➤ **ENSAF: Small-scale accelerator facilities**

**Sotirios Harissopulos**

➤ **NuPIA: Nuclear Physics Innovation**

**Marie-Hélène Moscatello**

**Muhsin N. Harakeh**

## JRAs

**The joint research activities deal with novel and innovative technologies to improve the operation of and enhance the access to ENSAR2 facilities. They are in general relevant to more than one facility and rely on strong participation of the European university groups. These activities involve all facets of operation of an accelerator facility.**

**Muhsin N. Harakeh**



➤ **PASPAG: Particle and gamma detection**

**Olof Tengblad**

➤ **PSeGe: AGATA detector + applications**

**Andres Gadea**

➤ **TheoS: Theory of Nuclear Structure & Reactions**

**Denis Lacroix**

➤ **RESIST: Resonant ionisation techniques for separators**

**Iain Moore**

➤ **SATNuRSE: Simulations and analysis tools**

**Nasser Kalantar-Nayestanaki**

➤ **EURISOL facility (all stages)**

**Yorick Blumenfeld**

➤ **TecHIBA: Stable ion beams + medical isotopes**

**Faiçal Azaiez**

**Muhsin N. Harakeh**

## **JRA2-PSeGe: Position-Sensitive Germanium detectors for nuclear structure and applications**

**Is focused on 3-dimensional position-sensitive Ge detectors dedicated to nuclear structure and applications in imaging.**

**Task 1: New technologies on passivation and segmentation (INFN)**

**Task 2: R&D on novel Ge-detector geometries for ultimate position resolution and efficiency (GSI)**

**Task 3: R&D on segmented p-type coaxial detectors (CSIC)**

**Task 4: Network activity: Demonstration of imaging applications and associated detector technologies (ULIV)**

**Subtask 4.1: Demonstration of imaging applications**

**Subtask 4.2: Detector encapsulation techniques**

**Subtask 4.3: Low-power pre-amplifiers & cryostat R&D / BSD, HV, LV distribution**

**Subtask 4.4: Pulse-Shape Analysis and neutron-gamma discrimination**

# Discussion on ENSAR -NEXT

- My personal impression: it is unlikely that just a “Continuation” of PSeGe will get through, we need new proposal.
- e.g. : After R&D phase, go to completion of prototypes and technology transfer, in this case in collaboration with industrial partners. Also strengthen the imaging applications in terms of PSA and Characterization and/or else.
- New ideas are more than welcome!

