

150



News of the ¹⁵⁰ Group

Maria J. G. Borge



Outline

- Fellows Associates and students
- Courses and workshops during 2014
- ENSAR 1
- ENSAR 2
- Financial situation of the collaboration
- Collaboration Matters
- News on 50th Anniversary of the Approval of ISOLDE
- Letter of Intend to host AGATA@HIE-ISOLDE

Fellows, Associates & Students

- Associates (new deadline 13th of September)
 - Alfredo Poves January - June 2014
 - Claes Fahlander July – Dec 2014
 - New Applications: Palle Gunnlaugsson
- Corresponding Associates (new deadline 13th of September)
 - Amandina Lima Lopes July-october 2014
 - New Applications: Janne Pakarinen
- Fellows: (new deadline 3th of September)
 - ✓ Susanne Kreim, Dec 2014 (ground state properties)
 - ✓ Elisa Rapisarda, Dec 2014 (Nuclear structure)
 - ✓ Monika Stachura, April 2013- March 2015 (Applied Sciences)
 - ✓ Jan Kurcewicz, Nov 2011 - Aug 2014 (ENSAR, 5 months prolongation, EU)
 - ✓ Miguel Madurga (June 2014 – May 2016) (Nuclear structure)
 - ✓ Stephan Ettenbauer (June 2014 – jan 2017, COLLAPS, Polarisation beams)
 - ✓ Akira Miyazaki (SC cavities)
 - ✓ Kara Lynch (Jan 2015 – Dec 2017)
- Doctoral student: **Next deadline 6th of May 2014.**
 - ✓ **DOCTORAL STUDENT For FIXED DECAY STATION : NEW**
 - ✓ **Doctoral Program with Greece for life sciences (50% GR, 50% CERN):**
 - Stavroula Pallada (March 2014 - Feb 2017)
 - ✓ **Doctoral Program with Germany**
 - Laura Grob Jun2014 –
- **Technical student: : One next year for the ISOLDe Tape Transport system (50% PH + 50% EN)**
- Technicien: Julien Thiboud, -August 2014 (Col + EU support)
- User support: Jennifer Wetterings (50% Col + 50% PH)

Courses 2014 / Workshops

● Courses

- Nuclear Reactions and Nuclear Structure Course

Wilton Cartford, Alexia DiPietro, and Antonio Moro

➤ 22-25 April 2014

- Separator courses in December 2014

● Workshops

- ISOLDE Workshop 15 – 17 December 2014

One session dedicated to celebrate the 50 years anniversary of ISOLDE approval.

- CATHI (Cryogenics, Accelerators and Targets for Hie-ISOLDE) Review Meeting: The goal is to present to the ISOLDE community the results achieved throughout the duration of the CATHI project and their contribution to the HIE-ISOLDE project.

Date: 22nd – 26th September 2014; [Deadline for inscription June 27th](#)

Hotel H10 Marina, Barcelona, Spain

<http://www.hotelh10marinabarcelona.com/fr/index.html>



ENSAR prolong until December 2014

Number of beam hours-Full Contract	5200
provided as of 31/12/12	6946,4
Number of users- full contract	400
Supported as of 31/12/12	352 (User counted 1 per IS-exp)
Number of days support- full contract	2800
Supported as of 31/12/12	237
Number of projects – full contract	
Supported as of 31/12/12	237 (different experiments)
T&S – full contract (EUR)	252000
Distributed	256947 (309672CHF)
Number Experiments / researchers	75 / 352
Rate of days per experiment	4.69 researcher / exp
Access costs – full contract (EUR)	291408
Access costs up to 31/12/12	389276 (= 6946,4 x 56,04)

Remining 32.759 CHF for 2014
Equivalent to 237 days.

ENSAR² (European Nuclear Structure and Application Research)

- **Mimbres of SSC:** R. Alba, F. Azaiez, M.J.G. Borge, D. Cortina Gil, M. Freer, J. Gerl, H. Goutte (substituting for W. Korten), M. N. Harakeh (Chair), P-H. Heenen, R.D. Herzberg, : R. Julin, M. Lewitowicz, A. Maj, N. Pietralla, K. Riisager, K. Rusek, S. Szilner, L. Trache, K. Turzó, W. Weise
- **Maximum Budget 10 Meuros**
- **Deadline for the application September 2nd 2014**
- **Meetings 2014 @ GSI 10 April 2014, Paris 16-17 June 2014**

TNA for ENSAR²: : 47.4 %

GANIL (France)

GSI (Germany)

LNL / LNS (Italy)

JYFL (Finland)

ISOLDE – CERN (Switzerland): 712.000 Euros (10 M)/ ENSAR 2009: 543.380 (8M) Euros

ALTO – CNRS (France)

KVI (The Netherlands)

SLCJ-HIL / IFJ PAN (Poland)

ELI-NP / IFIN-HH (Romania)

ECT* (Italy)

JRA / NA

- All **Integrating Activity (IA)** should be for the benefit of the **Research Infrastructures (RIs)** within the IA. The **Trans National Access Activities (TNAs)** are to serve the community by offering access to the advanced unique RIs of an IA.

NAs @ ENSAR² : 15,2 %

FISCO: Management NA

NUSPRA: Network of facilities to propose common DAQ, electronics..

MEDINET: nuclear applications

(medical applications, *e.g.*, hadrontherapy?)

ENSAF: small scale accelerator facilities

NUSPIN: Strengthen nuclear structure community

GDS: Active targets (TPC gaseous detectors)

MIDAS: ECR ion sources

The JRAs @ ENSAR² : 37.4 %

TheoS(Nuclear Structure & Reactions)

AGATA detector + applications

ECOS: stable ion beams + medical isotopes

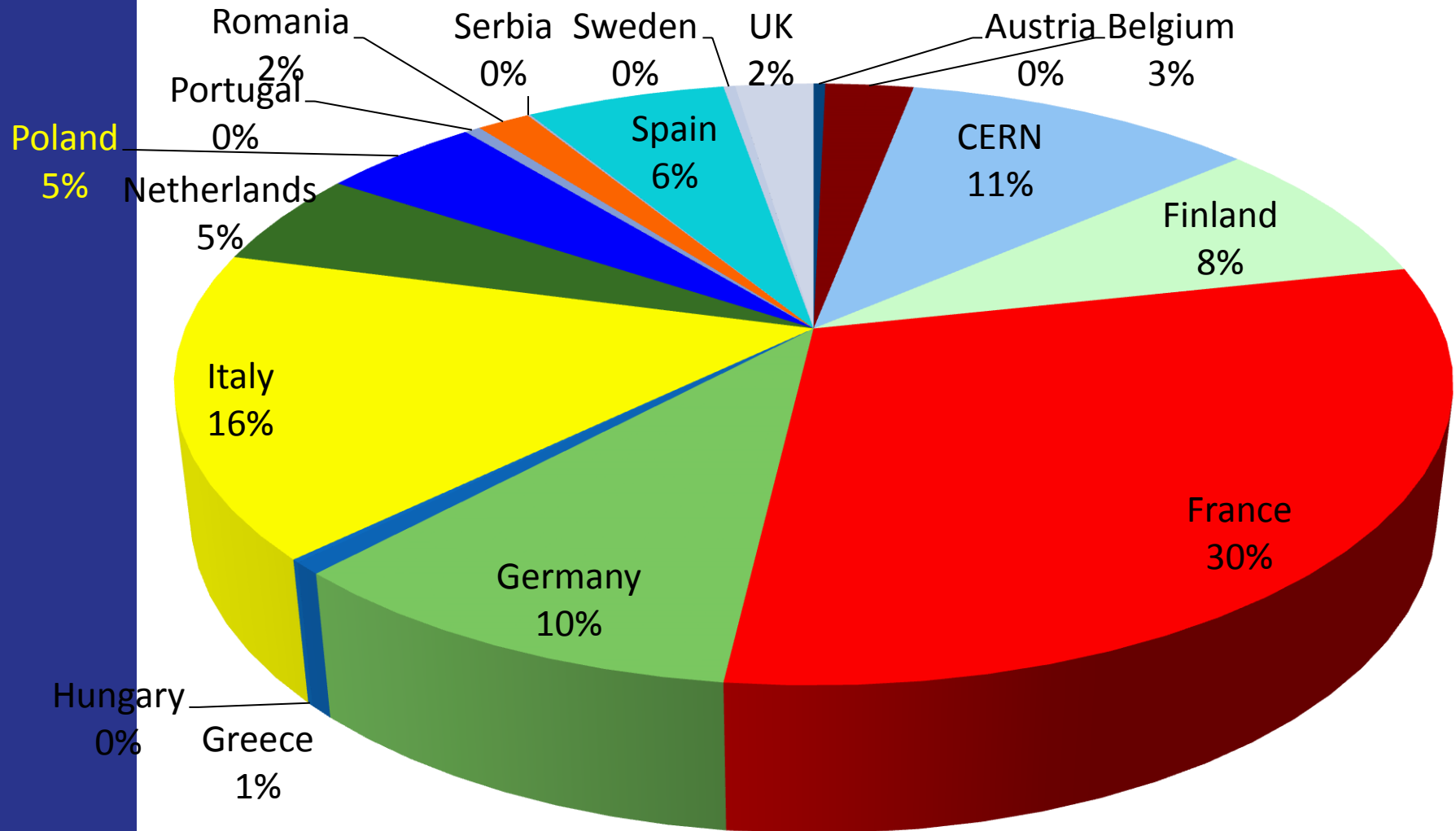
EURISOL facility (all stages)

RESIST: resonant ionisation techniques for separators

PASPAG: particle and gamma detection

SiNuRSE2: simulations

ENSAR² Beneficiaries per Country





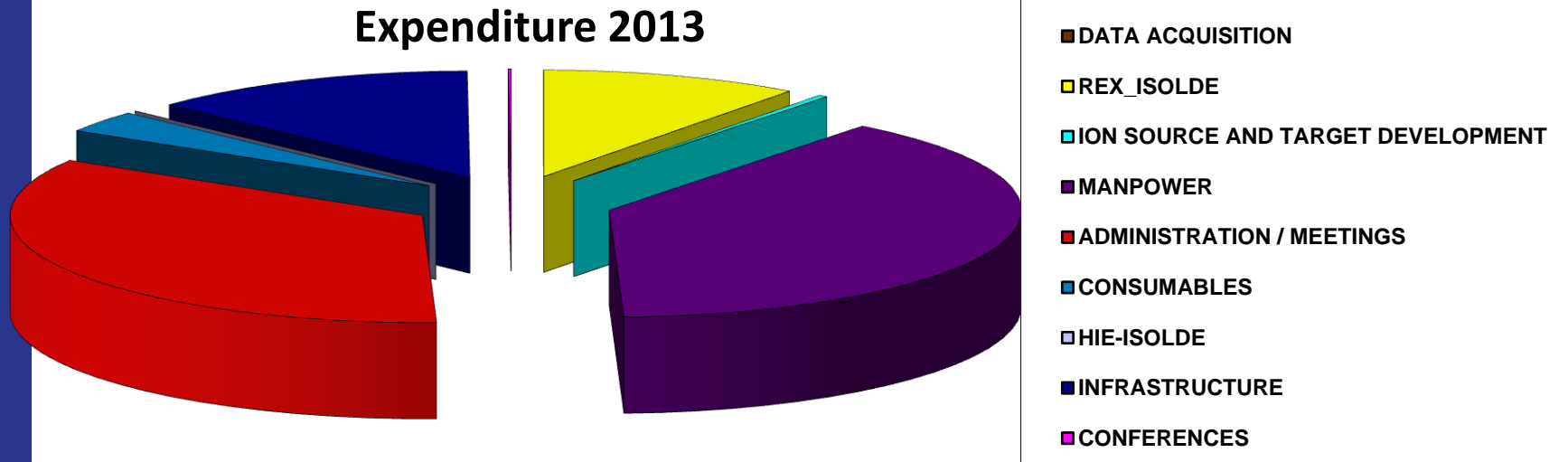
Collaboration Matters

Income of the collaboration

Country	Amount per year (CHF)	2013 contribution Received
Belgium	60.000	✓
CERN	60.000	
Denmark	60.000	
Finland	60.000	
France	60.000	
Germany	60.000	
Greece		
India		
Ireland		
Norway	60.000	✓
Romania	60.000	✓
Spain	60.000	
Sweden	60.000	✓
United Kingdom	60.000	✓

Bulgaria has agreed with the ISOLDE-MoU & Sergio Bertolucci has signed the 21st of March 2014.
Poland is in the process to apply.
Algeria is interested in joining.

Expenditure Collaboration



Contribution 2013 and 2014 to HIE-ISOLDE already transferred.

Minimum Expenditure foreseen for **2014** 250.00 – 300.000
(presently: 134.264 SCHF)

Balance 23 June 2014	431. 810,15 SCHF
Contribution 2012	96,2 % received
Contributions 2013	75 % received
Contributions 2014	52.5 % received

HIE-ISOLDE 2

- **Revised MTP in May:** "From a physics point of view, an early implementation of the TSR at the HIE-ISOLDE facility would be desirable. However, given the shortage of manpower and the need to focus on the LHC programme, this revised plan proposes the completion of HIE-ISOLDE Phase 2 a year later than previously foreseen, provided external funding is secured. This implies physics exploitation of HIE-ISOLDE Phase 2 (10 MeV/n) and the integration of the TSR only after the completion of LS2. The TSR commissioning would be 2.5 years later."

It is important to maintain the contribution of the collaboration for the period 2016-2020.

As we have to pay the loan at a rate of 140 kCHF/y we should engage 400 kCHF / y

The SPC afterwards after some lobbying was informed that the 10 MeV/u is foreseen for physics in 2017. The full SPC was reassured by this statement and Mark hopes it is taken up in the minutes. Concerning the TSR, the SPC recommends the revision of the plan to postpone the integration to after LS2.

Celebration 60 y: Inauguration of the Synchrocyclotron Visit Point:EPS historical Building



“The ISOLDE Facility, approved in 1964 and served by beams from the SC from 1967 till 1990 was the first in the world to produce tailored made nuclei enabling unique experiments with a large variety of ion beams.”

AGATA @ ISOLDE

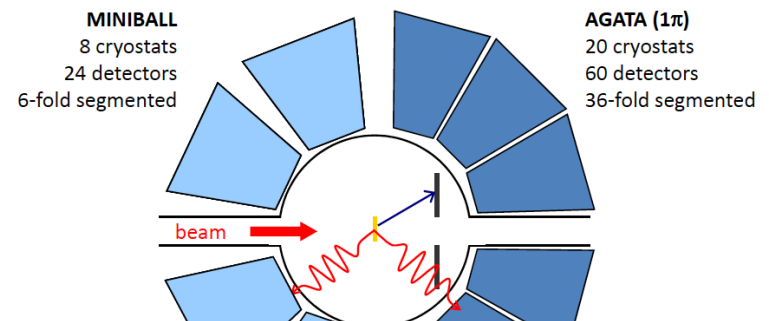
- The AGATA Collaboration has to decide soon on where to locate the instrument from 1/1/17 for its next science campaign (typically 18-36 months). Two applications: prolongation at GANIL and RIKEN
- Lol's submitted to the AGATA collaboration (to Giacomo de Angelis)
27th of May 2014.

Proposal submitted for 2020-2021 based

- 1) Have full energy
- 2) Increase of intensity from LINAC 4 + 2 GeV of PS Booster.

It will be defended by the Miniball chair

P. Reiter June 26th



CONCLUSIONS: The ISOLDE community is interested to host the AGATA detector. Considering the time scale of the HIE-ISOLDE project and the expected increase in intensity due to the advent of Linac4 and the increase of energy of the PS-Booster we would like that the AGATA collaboration considers the option of moving the AGATA detector to couple to Miniball for 2020-2022. This move will require a certain effort for the AGATA collaboration, as ISOLDE as such has no strong technical in-house support. At the same time we think we can guarantee ample beam time and the largest variety of tailored made radioactive beams in the world. The period from 2017-2018 is not very efficient as the second Long-shutdown at CERN is foreseen now for mid-2018.

Call for Physics Coordinator

● Description

- The coordinator is responsible for the management of the experimental physics programme at ISOLDE.
- He/she defines the beam schedule and oversees its implementation in cooperation with the ISOLDE technical staff. He/She acts as liaison between the users and the technical staff.
- The coordinator also serves as Group Leader In Matters Of Safety (GLIMOS) at ISOLDE and as scientific secretary of the ISOLDE Neutron Time of flight Committee (INTC).

● **Qualifications:** PhD in Physics with some post-doctoral experience.

● **Prerequisites:** -good communication and organizational skills-experience or knowledge of ISOL techniques for radioactive ion beam production-research experience employing radioactive ion beams-some acquaintance with the physics programme at ISOLDE.

● Procedure:

- 1) call for candidates: 1 August – 1 October
- 2) set a committee to look at the candidates and build a short list of 3-4 candidates.
- **Invite them for a short presentation** in the ISCC meeting of 4th of November

PUBLICATIONS

YEAR	N. PUBLICATIONS	PH. D thesis
2010	67	V. Bilstein T.E. Cocoolios R. Domínguez Reyes D. Fink S. Naimi D. Neidherr K. Wimmer A. Meaney
2011		M. Albers J. Lommen O. Müller M. Thürauf M. Zboril
2012	62	Ch. Borgmann E. Estevez J.G. Johansen T. E. Mølholt A.B. Perez Cerdán M. Seidlitz M. Stachura
2013	90	P. Kessler B. Siebeck T.J. Procter D. Di Julio J. Cullen K. Kreim
	16	

Please send us the reference and if possible a copy of the thesis done based in data from ISOLDE

