



# AGATA Collaboration Council

Legnaro National Laboratory

11<sup>th</sup> November 2021

Silvia Leoni (Milan University and INFN)



# Welcome to the 10<sup>th</sup> AGATA Collaboration Council

## AGENDA

- **Report from ACC** (S. Leoni): ACC Memberships, Meetings, ...
- **Report from ASC** (J. Simpson): MoU, AGATA Campaigns, ...
- **Report from AMB** (A. Gadea)
  
- **AGATA Publication Policy**: Update, Core List for LNL campaign, ...
- **AGATA Data Policy**: Open access data for AGATA Phase 2, ...
  
- **AGATA Web Page**
  
- **AOB (Diversity Charter)**

# AGATA Spokespersons and Chairs

## AGATA Collaboration Council

- 2021- : Silvia Leoni (Italy)
- 2017-2021: Wolfram Korten (France) → *AGATA Science WHITE Book*
- 2014-2017: Johan Nyberg (Sweden) → *Physics Opportunity (EPJA, 2020)*
- 2010-2014: John Simpson (UK)



# AGATA Collaboration Memberships

Steering Committee Chairperson: J. Simpson



Bulgaria:	Univ. Sofia, INRNE Sofia	
Finland:	Univ. Jyväskylä	
France:	GANIL Caen, IP2I Lyon, IJC Orsay, IPHC Strasbourg, DRF/IRFU Saclay,	
Germany:	GSI Darmstadt, TU Darmstadt, Univ. zu Köln	
Hungary:	ATOMKI Debrecen	
Italy:	INFN Firenze, Legnaro, Milano, Padova	
Poland:	IFJ PAN Krakow, University of Warsaw (HIL)	
Spain:	CSIC-Universidad de Valencia, Instituto de Fisica Corpuscular. Universidad de Valencia, Escuela Tecnica Superior de Ingenieria CSIC, Instituto de Estructura de la Materia, Madrid Universidad de Salamanca, Laboratorio de Radiaciones Ionizantes.	
Sweden:	Lund Univ., KTH Royal Institute of Technology Stockholm, Uppsala Univ, Stockholm Univ.	
Turkey:	Univ's Ankara, Istanbul, Kocaelli, Bitlis Eren	
UK:	Univ's Brighton, Edinburgh, Liverpool, Manchester, West of Scotland, Surrey, & York, UKRI-STFC Daresbury	
Romania:	IFIN-HH Bucharest	
Slovenia:	Ljubljana	

**13 Countries**  
**40 Institutions**

# AGATA Collaboration Meetings

- 10-12 November 2021, LNL, Legnaro, Italy **10<sup>th</sup> AGATA Collaboration Meeting (from GANIL to LNL ...)**
- The collaboration meeting 2020, planned to be held at GANIL during the AGATA week in September 2020, was cancelled due to the COVID-19 pandemic.
- 24-28 June 2019, Orsay, Paris, France
- 25-29 June 2018, IFIC, Valencia, Spain
- 26-29 June 2017, GSI, Darmstadt, Germany
- 30 June - 1 July 2016, San Servolo, Venice, Italy
- 6-7 July 2015, IPN-Orsay, Paris, France
- 26 June 2014, GSI, Germany
- 27 June 2013, Liverpool, UK
- 27 June 2012, Orsay, France
- 30 June 2011, Padova, Italy

*Meeting usually held together with a workshop on nuclear structure physics*

NUSPIN (2016-2019), (EGAN 2011-2014), AGATA inauguration at LNL (2009)

*future meetings? together with Pre-PAC Meetings?*



pre-PAC Workshop of AGATA@LNL

8–10 Nov 2021  
INFN-LNL  
Europe/Rome timezone

## Organized by

Javier Valiente Dobon (INFN Legnaro Laboratory), Local Project Manager  
Magda Zielinska (CEA, Saclay), LNL Campaign Spokesperson

More than 100 participants

34 Letters of intent: Stable beams, mainly AGATA@PRISMA, also other ancillaries

Call for proposals: end 2021

PAC: end of February 2022

Start Campaign: April 2022

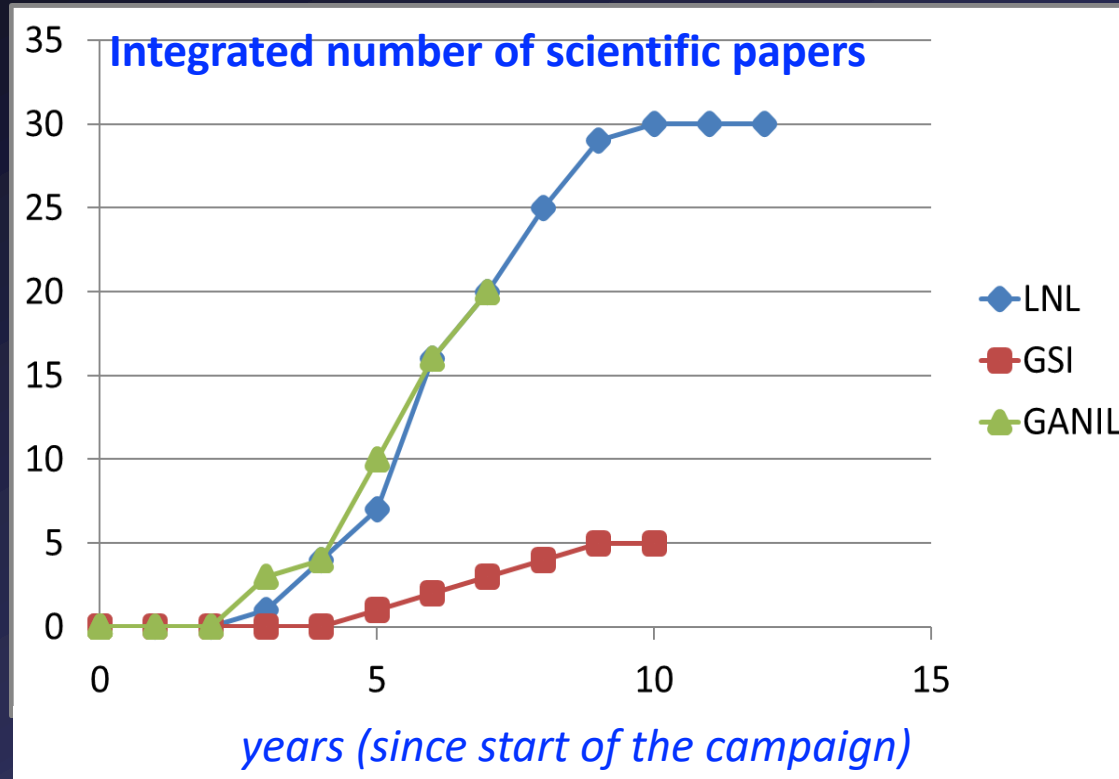


10-nov Wednesday		11-nov Thursday		12-nov Friday	
9:00-13:00 AGATA PRE-PAC		Chair: P. Reiter		Chair: A. Nannini	
		9.30-9.50	Tayfun Huyuk (IFIC (CSIC - Universidad de Valencia)): AGATA@GSI -S433 Collectivity in 52Fe revisited with relativistic RIB techniques	9.30-9.50	ONLINE Valérian Alcindor (TU-Darmstadt): Report on the AGATA@GANIL experiment E744
		9.50-10.10	Rosa Perez-Vidal (LNL/CSIC-Universitat de València, Spain): Report on the AGATA@GANIL experiment E708	9.50-10.10	ONLINE Christian Aaen Diget (University of York): Report on the AGATA@GANIL experiment E768
		10.10-10.30	ONLINE Tamara Milanović ("Vinča" Institute of Nuclear Sciences, National Institute of the Republic of Serbia): Report on the AGATA@GANIL experiment E682	10.10-10.30	Daniele Brugnara (LNL): Report on the AGATA@GANIL experiment E786S
		10.30-10.50	Chloé Fougères (GANIL): Report on the AGATA@GANIL experiment E710	10.30-10.50	Irene Zanon (LNL): Report on the AGATA@GANIL experiment E775S
		10:50-11:20	COFFEE BREAK	10:50-11:20	COFFEE BREAK
		Chair: B. Quintana			
		11.20-11.40	ONLINE Andrea Jungclaus (Instituto de Estructura de la Materia, CSIC, Spain): Report on the AGATA@GANIL experiment E693	11.20 CLOSING REMARKS	
		11.40-12.00	Giorgia Pasqualato (IJCLab, IN2P3/CNRS, Université Paris-Saclay): Report on the AGATA@GANIL experiment E706 FIRST		
		12.00-12.20	ONLINE Johannes Heines (University of Oslo): Report on the AGATA@GANIL experiment E706 SECOND		
13.00-14.30	LUNCH	12.20-12.40	ONLINE Sara Ziliani ("University of Milan and INFN): Report on the AGATA@GANIL experiment E676	<div>16 Reports:</div> <div>15 from AGATA@GANIL (2015-2020, total of 26 exp.)</div> <div>1 from AGATA@GSI</div>	
AGATA Collaboration Meeting		12.40-13.00	ONLINE Martha Liliana Cortes (TU Darmstadt): Report on the AGATA@GANIL experiment E699		
		Chair: G. Duchene			
		14.30-14.45	S. Leoni: INTRODUCTION		
		14.45-15.15	J. Simpson: ASC Report		
		15.15-15.45	E. Clement: AMB Report		
		15.45-16.15	O. Stezowski: DATA Management		
		16.15-16.45	COFFEE BREAK		
		Chair: A. Gadea			
		16.45-17.15	E. Clement: Report AGATA@GANIL		
		17.15-17.45	J. Valiente-Dobon: AGATA@LNL		
		17.45-18.00	M. Mazzocco: the EXOTIC beam line		
		13.30-14.30	LUNCH		
		Chair: K. Wimmer			
		14.30-14.50	Marcin Palacz (Heavy Ion Laboratory, University of Warsaw): Report on the AGATA@GANIL experiment E703		
		14.50-15.10	Rafael Escudero (University of Padova/ University of Sao Paulo): Report on the AGATA@GANIL experiment E731		
		15.10-15.30	Andres Gadea (IFIC, CSIC-University of Valencia): Report on the AGATA@GANIL experiment E730		
		15.50-16.00	COFFEE BREAK		
		16.00-17.30	ACC CLOSED Meeting		

- ASC report (J. Simpson)
- AMB report (A. Gadea)



# AGATA PUBLICATION



More than one peer-reviewed paper per experiment

from AGATA web page: <https://www.agata.org>

# AGATA Physics Publications and Publication Policy

If you want to display the table of physics publications submitted via the AGATA core author procedure, click on this [link](#).

## Introduction

The AGATA Steering Committee (ASC) has defined a policy for the submission of publications relating to AGATA. This includes physics publications, conference proceedings, technical papers and review articles.

**AGATA physics publications** are based on results from the AGATA campaigns at LNL-INFN 2010-2011, GSI 2012-2014, GANIL 2015-2021 and LNL-INFN 2021-. For these, the ASC has an approved list of AGATA core authors for each site (see section [Policy for Submission of AGATA Physics Publications](#)). An AGATA physics publication is defined as a peer-reviewed article that is based on scientific results from an experiment (or experiments) performed with AGATA.

Conference proceedings that include results from AGATA physics experiments should follow normal authorship courtesy and the Chair of the AGATA Collaboration Council (ACC) ([Silvia Leoni](#)) should be informed at the time of publication.

**All physics publications, including conference proceedings, must acknowledge the AGATA collaboration and thank the host laboratory in the acknowledgements.**

**AGATA technical and instrumentation publications** do not have a defined authorship policy. However, such publications must be reviewed by the AGATA Management Board (AMB) before it is submitted to a journal. Information about this procedure can be found [here](#).

The ASC encourages all publications to be Open Access.

It is reminded to the authors of AGATA physics publications that the ownership of data generated by the AGATA spectrometer resides with the AGATA collaboration as detailed in the [AGATA Data Policy](#).

**FIRST physics publication from an AGATA experiment:** ordinary authors + CORE authors (if the wish)  
**SUBSEQUENT physics publications:** not obliged to involve the CORE author list

## Policy for Submission of AGATA Physics Publications

AGATA physics publications, based on results from the AGATA campaigns at LNL-INFN 2010-2011, GSI 2012-2014, GANIL 2015-2021 and LNL-INFN 2021-, may have, in addition to the main responsible author and the ordinary co-authors (those involved in the experiment, analysis, etc.), a number of additional co-authors, which belong to the AGATA core author list of the respective campaigns. For the **first** AGATA physics publication based on results from each AGATA experiment, all persons on the AGATA core author list of that campaign, will be asked if they wish to be included as co-authors on the publication.

The ASC working with the Chair of the ACC is responsible for controlling and updating the AGATA core author lists. The lists will be updated regularly by adding and removing names.

Subsequent physics publications from the same experiment are not obliged to this procedure involving the core author list. When such a publication has been accepted, it must be registered, which is done by informing the Chair of the ACC ([Silvia Leoni](#)). This is to ensure that the project has a complete record of all AGATA publications.

## Policy for Submission of AGATA Review Articles

Review articles are very welcome and recognise the excellence of the scientific and technical output from AGATA. In order for the collaboration to track these publications and advise in the preparation of the publication, including any technical comments, the ASC has defined a specific procedure.

The paper should be submitted to the Chair of the ACC ([Silvia Leoni](#)) prior to submission to the journal. The Chair will then check the paper and consult with the Chair of the AMB for additional technical comments.

**REVIEW papers (invited publications):** to be submitted to the ACC prior submission to the journal  
Chair of ACC will consult the AMB for technical comments

# AGATA Technical and Instrumentation Publications

An AGATA technical or instrumentation publication, considered in this context, is a peer-reviewed article or peer-reviewed conference proceedings article that describes or is based on technical developments of AGATA.

There is no defined authorship policy for AGATA technical and instrumentation publications. Nevertheless, all members of the AGATA collaboration are committed to produce publications of high quality, on behalf of the full collaboration. Therefore, the AGATA Management Board (AMB) has decided to have the following policy:

**All AGATA technical and instrumentation publications must be sent to the AMB for review before being submitted to a journal.**

In order to help you to have a fast revision of AGATA technical and instrumentation publications, the AMB has nominated Johan Nyberg (Uppsala University), to be the contact person on issues concerning this type of AGATA publications. Please send your manuscript for an AGATA technical and instrumentation publications to him. He will distribute the manuscript to all AMB members. The manuscript will be discussed at the next AMB meeting or video conference, which are held roughly once per month. As soon as possible after such a meeting the author of the manuscript will obtain the comments to the paper given by the AMB members.

# CORE LIST for upcoming LNL CAMPAIGN to be set up

- is being collated by the ASC
- countries representatives should be in touch

**AIM:** have the CORE list ready by the end of this year



# **AGATA DATA POLICY:**

[https://www.agata.org/acc/data\\_policy](https://www.agata.org/acc/data_policy)

## **Ownership of the data**

- All data obtained as a result of free (non-commercial) access to AGATA resides with the AGATA collaboration.
- The AGATA collaboration is defined as the AGATA Collaboration Council (ACC).
- The AGATA Spokesperson is the chairperson of the ACC.

## **Curation of the data**

- All data will be curated in well-defined formats for which the means of reading the data will be specified by the AMB.
- Data will be stored at the host laboratory for a temporary period. This temporary period is not fixed but typically it will be less than 2 months. This will be defined by the AMB.
- Data will initially be transferred to a GRID storage site(s) for archival.
- Transfer of data will be organised by the AMB.
- Storage of data at local laboratories is the responsibility of the experimental collaboration.

## **Access to the data**

- Access to the data is to be controlled by the AGATA collaboration.
- The AGATA Spokesperson will delegate this control to the experimental collaboration via the primary contact for the initial period of exploitation.
- This initial period will be under the control of the AGATA Spokesperson, typically 5 years.
- This period can be extended upon request to the AGATA Spokesperson.
- The data for exploitation will be made available to the wider AGATA collaboration after this period.
- All bona-fide members of the AGATA collaboration will have access to the data to improve the operation of the instrument, for example to monitor and improve detector performance and pulse shape analysis, tracking and analysis code development. This access will be managed by the AGATA Management Board and the AGATA Spokesperson.
- Password protection, where possible and appropriate will be instigated.
- Proper authentication and authorisation will be used.



# Open science, open data Data Management Plan for AGATA Phase 2

O.Stézowski

On behalf of the Data Processing Group

Work from dedicated DMP meetings March 2021 → June 2021

## we need to define a DATA Management Plan

(it will be requested at various levels: European call, funding Agency, etc...)

- dedicated Data Processing Group
- few decisions to be taken in ACC and AMB

detailed documentation is being prepared by Data Processing Group  
(2 drafts available)



Phase 2

Working  
document  
#0

## Data Processing, Re-processing, Management and Analysis

### Part 1

*Description of Phase 1 and main goals of Phase2*

*The Data Processing Team*

Version / Date	Comments	ATRIUM Link
0 – 30/06/2021	draft version	<a href="https://atrium.in2p3.fr/8bcef4d2-f74d-4d1d-b74b-05fdef708407">https://atrium.in2p3.fr/8bcef4d2-f74d-4d1d-b74b-05fdef708407</a>

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Phase 2

Working  
document  
#0

## Data Processing, Re-processing, Management and Analysis

### Part 2

*Data Management Plan*

*The Data Processing Team*

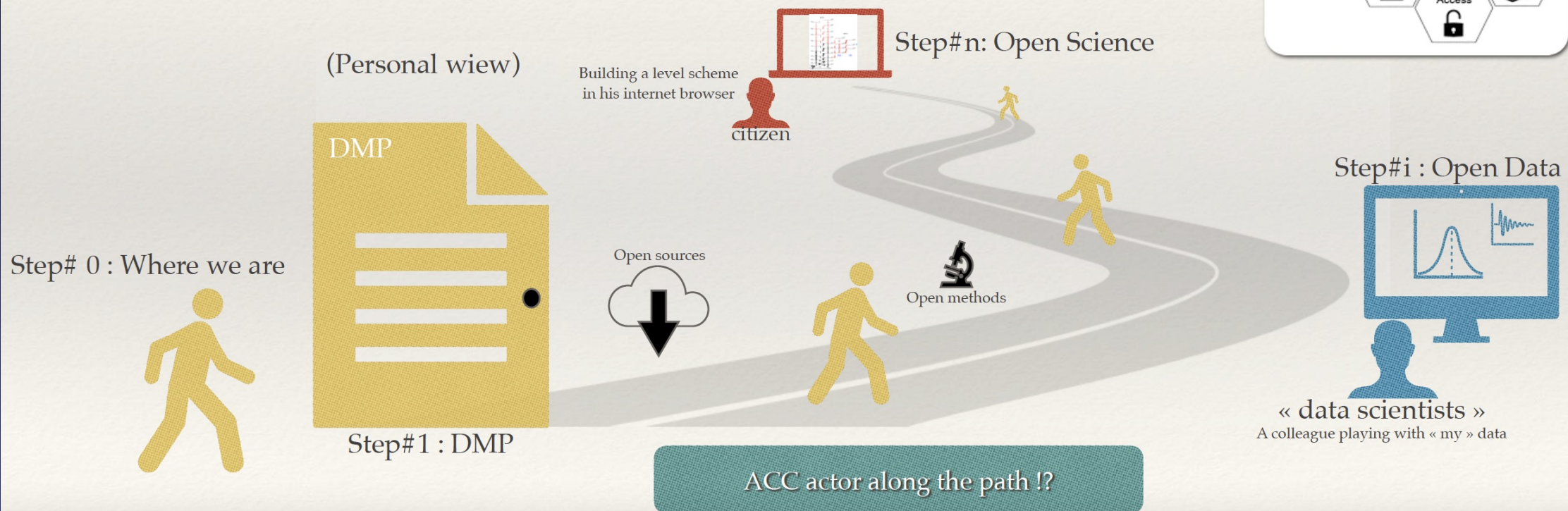
Version / Date	Comments	ATRIUM Link
0 – 30/06/2021	draft version	<a href="https://atrium.in2p3.fr/3579ab29-c80c-4e97-83c9-bb4613747162">https://atrium.in2p3.fr/3579ab29-c80c-4e97-83c9-bb4613747162</a>

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# « OPEN » path / future of the AGATA Data

Our researches are almost fully founded by **public** agencies !

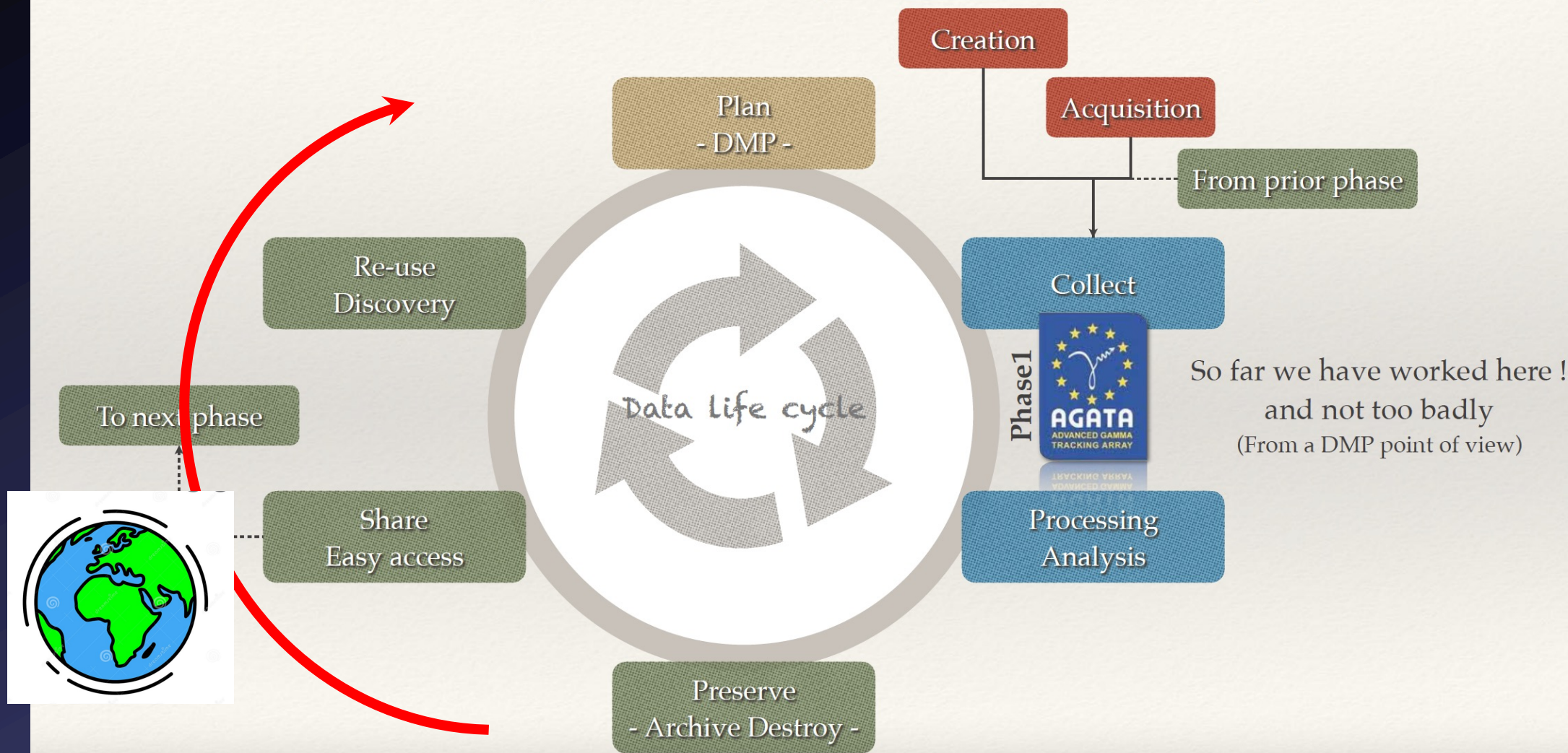
*All the products from such funds have to be given back to the society* →





# External context : what is a DMP ?

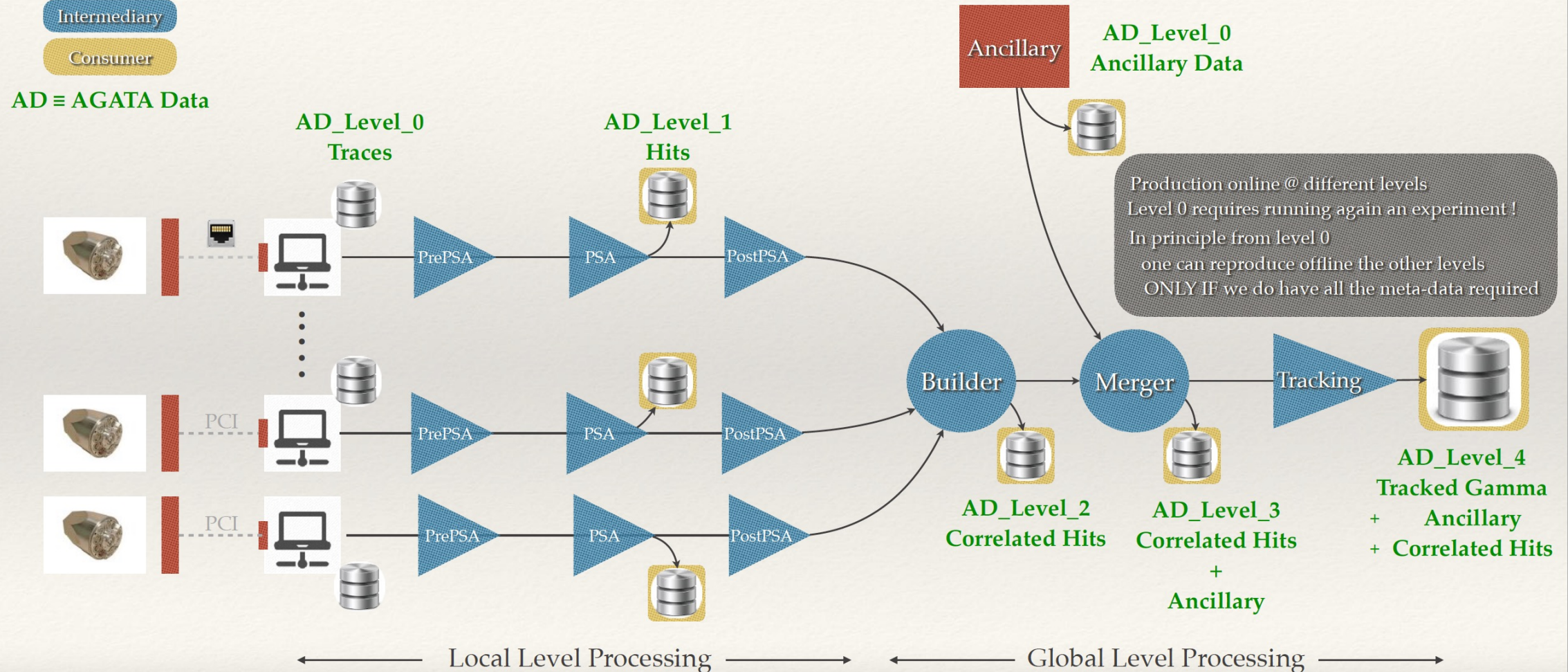
It means we should establish a plan to deal with the cycle of life of the data produced by AGATA ...





# Phase 1 : our practices so far ...

More in the document called ADP-Part1, to be sent to the ACC



we need now to be **FAIR**: Findability, Accessibility, Interoperability, Reusability

**1- a DOI of the dataset used to publish a paper is going to be probably required in references of the paper**  
(already done in some community, e.g., ILL ...)

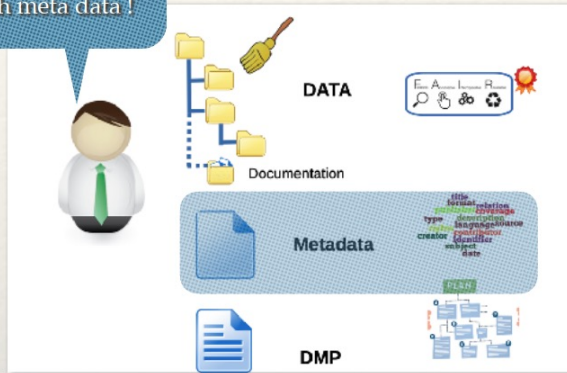
*the AGATA collaboration should start considering which basic information should be made available as meta data set (including, e.g., calibration, optimised algorithm parameters, ...)*

This could be required at the same time a paper goes to the core list process



# Metadata : some questions to the ACC

Remember :  
rich meta data !



Description with metadata of a dataset, from the point of view of the collaboration  
(+more technical from the Data Processing group)

**Minimal**  
(Almost standard & mandatory)

- **Unique name\***  
*Local name Ex : e780*  
*Campaign Ex: NEDA DIAMANT*
- **Context\***  
**Short description\***  
**Full description\***
- **Ownership\***  
• *Date of creation*  
• *Licence, policy at date*  
• *Configuration AGATA*  
• *# of Ge crystal etc ...*
- **link to elog**  
...

**Useful**  
(What you think it helps a lot)

- **Ex: Tags/keywords ?**  
#Beam #target #energy
- **Ex: List of runs, # of events ?**
- **Software versions ?**
- ...

**Ideal**  
(Your perfect world)

- **Ex: Beam current ?**
- **Ex : PID of beam related data set ?**
- ...

**\*Propositions / more details**  
(To be validated by ACC)

## Unique name

AD\_P2\_EXP\_XXX, AD\_P2\_COM\_XXX, AD\_P2\_SOU\_XXX,  
AD\_P2\_TEST\_XXX, AD\_P2\_SIMU\_XXX ... what can be XXX ??

## Context

Short : a text giving the objectives of the experiment  
Full : DOI pointing to the full proposal ??? OK ??

## Ownership

All AGATA 'users' , spokesperson, what about ancillaries ?  
period of retention in case it is protected ?  
—> connected to the choice of licences !

Feedbacks from ACC now and all along the OPEN path ...

## How to define the METADATA information ...



## 2- For the data set produced at different levels

level 0, 1 , 2, 3, 4:

traces, hits, correlated hits, ancillary, tacked gamma + ancillary

### A time of embargo might be defined

it could be 5 years for all or different for each step etc ...

there might be more that one embargo time:

for AGATA collaborators (other that the ones one the proposal), one

for close collaborators (ex US colleagues ) and one for anybody

....

# How should the ACC to work on this task ?

A joined work between ACC and the Data Processing Group is required for some time (next 6 months ...)


AMB as a consultant

*ACC members might expect to be*

- *involved in discussions,*
- *meetings online,*
- *email exchanges with specific questions*
- ....


# Official AGATA web page: <https://www.agata.org>

## Johan Nyberg, J. Simpson



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### The Advanced GAMMA Tracking Array (AGATA) is a European gamma-ray spectrometer used for nuclear structure studies. Click [about](#) for further information.

### News

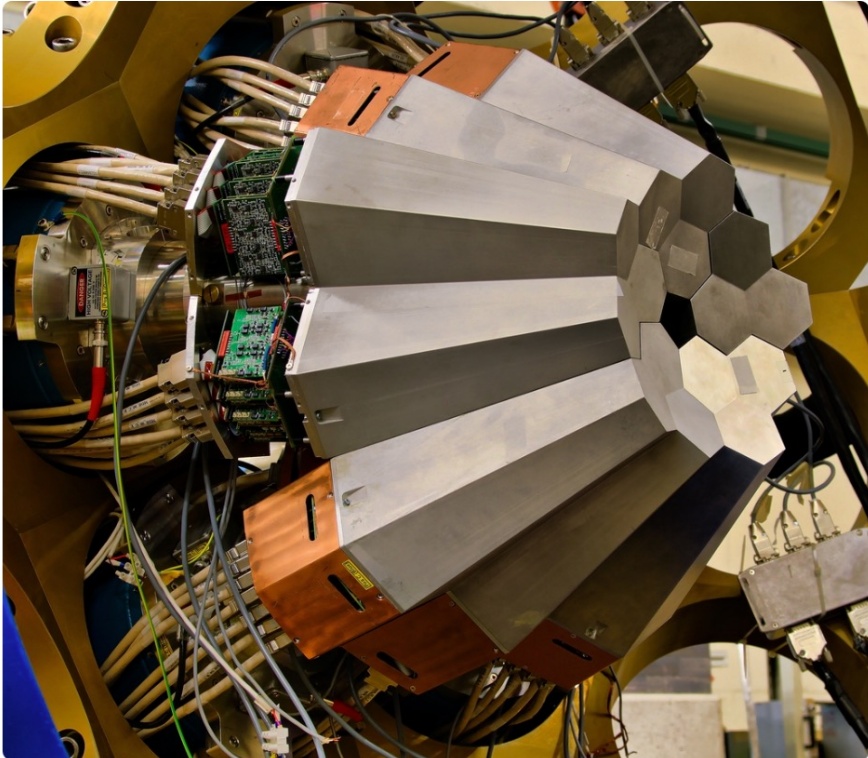
#### AGATA Collaboration Meeting 2021

The meeting will be held at LNL in Italy, November 10-12, 2021.  
[Read more](#)

#### AGATA@LNL Pre-PAC Workshop

The workshop will be held at LNL in Italy, November 8-10, 2021.  
[Read more](#)

## AGATA Home Page



The AGATA Demonstrator Array with 15 HPGe crystals mounted in front of the PRISMA

### Recent Publications

Complete set of bound negative-parity states in the neutron-rich nucleus  $^{18}\text{N}$

Lifetime measurements in the even-even  $^{102-108}\text{Cd}$  isotopes

Evidence for enhanced neutron-proton correlations from the level structure of the  $N=Z+1$  nucleus  $^{87}_{43}\text{Tc}_{44}$

A Development of a 40-Gb/s Readout Interface STARE for the AGATA Project

Full-volume characterization of an AGATA segmented HPGe gamma-ray detector using a  $^{152}\text{Eu}$  source

Gamma spectroscopy with AGATA in its first phases: New insights in nuclear excitations along the nuclear [chart](#)

# AOB ?

Are we happy with this selection?  
we could also select a subset...

## Diversity Charter

### JENAA-Joint ECFA-NuPECC-APPEC Activities

Diversity working group: to the importance of diversity as a motor to boost productivity and innovation, fight prejudice and discrimination and contribute to the improvement of social and economical standards.

[JENAA \(nupecc.org\)](http://nupecc.org) link to overview

Diversity charter: [Diversity Charter of APPEC ECFA NuPECC-9.pdf](#)

Diversity monitoring: [Monitoring Diversity Charter of APPEC ECFA NUPPEC-9.pdf \(nupecc.org\)](#)

List what they believe can be monitored and an initial list of Consortia , Committees, Collaborations, and Conferences that could involved

AGATA signed up to this charter in 2020

#### Monitorable variables (as listed by the Diversity group)

- Gender;
- Tenure diversity - Career level: not tenured, tenure track, tenured;
- Age diversity - Age groups (20 - 30, 31 - 40, 41 - 50, 51 - 60, > 60);
- Country where working;
- Citizenship.

AGATA starting to collate information on its committees ASC, AMB, ACC

Some information from AGATA week, and these meetings.

#### COMMENTS?

<https://ecfa.web.cern.ch/>

<http://www.nupecc.org/>

<http://www.appec.org/>

