

## ALLEGATO B

UNIVERSITÀ DEGLI STUDI DI MILANO

selezione pubblica per n.\_1\_ posto/i di Ricercatore a tempo determinato ai sensi dell'art.24, comma 3, lettera b) della Legge 240/2010 per il settore concorsuale \_ 02/A1 -FISICA SPERIMENTALE DELLE INTERAZIONI FONDAMENTALI\_, settore scientifico-disciplinare \_ FIS/01 - Fisica Sperimentale; FIS/04 - Fisica Nucleare e Subnucleare\_, presso il Dipartimento di \_\_\_\_\_ Dipartimento di FISICA "ALDO PONTREMOLI"\_\_\_\_\_, (avviso bando pubblicato sulla G.U. n. \_\_32\_\_ del \_\_\_\_ 21/04/2020\_\_\_\_) Codice concorso \_\_ 4359\_\_

## Agnese GIAZ CURRICULUM VITAE

INFORMAZIONI PERSONALI (NON INSERIRE INDIRIZZO PRIVATO E TELEFONO FISSO O CELLULARE)

COGNOME	GIAZ
NOME	AGNESE
DATA DI NASCITA	10/06/1985

## PROFESSIONAL EXPERIENCE:

Dicembre 2019 - Present	<b>Postdoctoral fellow</b> Università degli Studi di Padova, Italy <i>Measurement of CP violation in rare hadronic penguin dominated decays of the b quark with Belle II data.</i>
December 2016 – November 2019	<b>Researcher (ricercatore tempo determinato tipo a))</b> Università degli Studi di Padova, Italy <i>Development of JUNO (Jiangmen Underground Neutrino Observatory) experiment electronics</i>
July 2015 – November 2016	<b>Postdoctoral fellow (cofounded by CAEN s.p.a., Viareggio, Italy and INFN),</b> Istituto Nazionale di Fisica Nucleare, sezione di Milano, Italy <i>Development of a scintillator detector integrated system for gamma spectroscopy.</i>
May 2015 – July 2015	<b>Scientific and technical fellow</b> The Henryk Niewodniczanski Institute of Nuclear Physics, Krakow, Poland <i>PARIS array characterization and proton beams on LaBr<sub>3</sub>:Ce scintillators.</i>
May 2013–May 2015	<b>Postdoctoral fellow (funded by NUPNET GANAS Project),</b> Istituto Nazionale di Fisica Nucleare, sezione di Milano, Italy <i>Position sensitivity in continuous large volume crystals.</i>

## TEACHING ACTIVITIES:

2019- 2019	<b>Lecturer</b> , Università degli Studi di Padova (1 year: 32 hours – 80 students) <i>General Physics course of Biotechnology Degree (1<sup>st</sup> year students)</i>
2017 - Present	<b>Lecturer</b> , Università degli Studi di Padova (3 years: 68 hours, 44 hours, 44 hours – 100 students per years) <i>Experiment in Physics course of Physics Degree (1<sup>st</sup> year students)</i>
2017 – 2017	<b>Lecturer</b> , Università degli studi di Padova (1 year: 40 hours – 200 students) <i>General Physics course of Mechanical Engineering Degree (1<sup>st</sup> year students)</i>
2013 – 2016	<b>Teaching assistant</b> , Università degli Studi di Milano <i>Tutoring for the Physics Laboratory and Statistic Elements course of the Physics Degree</i>
2010 – 2012	<b>Teaching assistant</b> , Università degli Studi di Milano <i>Tutoring for the Physics course of the Biology Degree</i>

## OTHER TITLES:

2019 – 2028	<b>Abilitazione scientifica nazionale, seconda fascia – National scientific qualification for associate professor</b> Fisica sperimentale delle interazioni fondamentali – Fundamental interaction experimental physics
2018 – 2019	<b>Participation at MAECI Project</b> Project number: PRG05390
2016 – Present	<b>Reviewer for international Journals</b> <i>Nuclear Instruments and methods A</i> <i>Transaction on Nuclear Science</i> <i>Nuclear Science and Techniques</i>
Febraury 2019	<b>Teaching for learning course</b> Università degli Studi di Padova Active learning techniques
July 2016 – November 2016	<b>Local manager of CLYC experiment of CSN5 - Responsabile locale esperimento CLYC CSN5</b> Istituto Nazionale di Fisica Nucleare <i>Charaterization of CLYC scintillators</i>
April 2015	<b>Spokesperson of the experiment: “Fast Neutron Detection with two CLYC Scintillators”</b> Istituto Nazionale di Fisica Nucleare, Laboratori Nazionali di Legnaro
May 2011	<b>Spokesperson of the experiment: “Isospin Mixing in the N=Z Nucleus 80Zr at Medium Temperature”</b> Istituto Nazionale di Fisica Nucleare, Laboratori Nazionali di Legnaro



## EDUCATION:

---

2010–2013	<b>Doctor of Philosophy in Physics, Astrophysics and Applied Physics</b> Università degli studi di Milano Thesis title: “ <i>Measurement of high-energy gamma rays to study the dynamical dipole emission and the isospin mixing</i> ” Tutor: Prof. Franco Camera  Date of PhD graduation: 06/02/2013
2007–2009	<b>Master degree in Physics</b> Università degli Studi di Milano Thesis title: “ <i>Enhancing the capability for nuclear structure experiments with BaF<sub>2</sub> detectors coupled to large array</i> ” Tutor: Prof. Franco Camera Co-Tutor: Prof. Angela Bracco 110/110 cum laude  Date of master graduation: 02/07/2009
2004–2007	<b>Bachelor degree in Physics</b> Università degli Studi di Milano Thesis title: “ <i>Il problema della material oscura. (The dark matter problem)</i> ” Tutor: Prof. Luigi Galgani Co-tutor: Dr. Andrea Carati 104/110  Date of bachelor graduation: 24/07/2007
1999–2004	<b>High school diploma, scientific curriculum</b> Liceo Scientifico Statale “E. Fermi”, via Giovanni XXIII, Cantù (Co), Italy 87/100 Date of high school diploma: 28/06/2004

## STUDENT’S SUPERVISION:

---

2016 Università degli studi di Milano	<b>Master thesis co-supervisor</b> “ <i>Misura dell'efficienza di rivelatori LaBr<sub>3</sub> di grandi dimensioni</i> ” Student: Giulia Gosta
2016 Università degli studi di Milano	<b>Bachelor thesis co-supervisor</b> “ <i>Misura della risposta ai neutroni di AmBe con un CLYC 2"x2"</i> ” Student: Cristiana Fiscione
2016 Università degli studi di Milano	<b>Bachelor thesis co-supervisor</b> “ <i>Studio delle proprietà di uno scintillatore C7LYC 2'' x 2''</i> ” Student: Paolo Mezzani
2014 Università degli studi di Milano	<b>Master thesis co-supervisor</b> “ <i>In beam test of a PARIS array cluster</i> ” Student: Alice Mentana
2014	<b>Bachelor thesis co-supervisor</b>

Università degli studi di Milano	<p><i>“Caratterizzazione di nuovi scintillatori: GYGAG:Ce, CeBr<sub>3</sub> e SrI<sub>2</sub>:Eu”</i></p> <p>Student: Vittorio Fossati</p>
2014 Università degli studi di Milano	<p><b>Master thesis co-supervisor</b></p> <p><i>“Isospin mixing at finite temperature in <sup>80</sup>Zr”</i></p> <p>Student: Simone Ceruti</p>

## OUTREACH:

---

<b>Guide</b> 2018-present	<p><b>Guide of Laboratori Nazionali di Legnaro, Legnaro, Pd, Italy</b></p> <p><i>For secondary school students</i></p>
<b>Popularizer</b> 18-20/10/2019	<p><b>Partecipazione at Focus Live - Trento</b></p> <p><i>Presenter at INFN stand</i></p>
<b>Popularizer</b> 09-13/05/2019	<p><b>Partecipazione at Salone del libro di Torino</b></p> <p><i>Presenter at INFN stand</i></p>
<b>Speaker</b> 02/05/2019	<p><b>Seminar at Planetarium di Padova</b></p> <p><i>JUNO: a caccia di neutrini</i></p> <p><i>JUNO: the hunting of neutrinos</i></p>
<b>Guide</b> 2017 - 2019	<p><b>Participation at “Notte della Ricerca (Night of Research)”</b></p> <p><i>science fair</i></p>

## AWARDS:

---

<p><b>Award</b></p> <p>22-26/09/2014</p> <p>Pisa (PI), Italy</p>	<p><b>Prima Migliore comunicazione 2014, Sezione 1 - Fisica Nucleare e Subnucleare.</b></p> <p><b>First Place for the best presentation in nuclear and subnuclear physics session.</b></p> <p><i>Misura dello spettro <math>\beta</math> del <sup>138</sup>La</i></p> <p>100° Congresso Nazionale – Società Italiana di Fisica</p>
--	--

## PERSONAL SKILLS:

---

<b>Languages:</b>	<p><i>Native Italian speaker</i></p> <p><i>Fluent English (written and spoken)</i></p> <p><i>Basic Chinese: Chinese Course from April 2020</i></p>
<b>Communication skills:</b>	<p>Participation to large international projects, international schools, conferences, workshop and experiments with collaborators from Europe and others countries</p> <p>Several talks at international conferences and popular science seminar and events.</p>

<b>Other skills:</b>	<p>Spokesperson of two nuclear physics experiment at the Legnaro National Laboratories of INFN; in that role, supervisor of the preparation of the experimental setup, and of the successful installation of the setup.</p> <p><i>Electronics skills:</i> knowledge of FPGA and of VHDL programming language</p> <p><i>Business travel:</i> large experience with business trips, capability of planning a trip in a short time</p> <p><i>Driving:</i> B license, obtained on October, 11<sup>th</sup> 2003</p>
----------------------	---

## COMPUTER SKILLS:

---

<b>Operative systems and Microsoft Office:</b>	<p>Good knowledge of Microsoft Windows and of the most common programs, in particular good command of Microsoft Office</p> <p><i>Certified knowledge: ECDL</i> (European Computer Driving Licence) 08/04/2003, 7 exams.</p> <p>Good knowledge of Linux systems</p>
<b>Programming languages:</b>	<p>Great flexibility in using different languages depending on the context and the objectives; in particular, C++ and ROOT libraries, FORTRAN, MATLAB, PYTHON</p>
<b>Other</b>	<p>Good knowledge of LateX</p>

## ATTENDED SCHOOLS:

---

15-19/09/2014 Legnaro (PD), Italy	<b>LNL course on digital electronics</b>
03-08/06/2012 Firenze, Italy	<p><b>III SNRI Seminario nazionale rivelatori innovativi</b> (National seminar on innovative detectors)</p> <p><i>Using of the most innovative detectors in nuclear and sub nuclear physics and in applied physics fields.</i></p>
19-25/09/2011 Varna, Bulgaria	<b>XIX International school on nuclear physics, neutron physics and applications – 2011</b>
04-10/09/2010 Santiago de Compostela, Spain	<b>17<sup>th</sup> Euroschool on Exotic Beams</b>
19-24/07/2010 Varenna (LC), Italy	<b>International school of physics “Enrico Fermi”, Corso CLXXVIII - From the Big Bang to the nucleosynthesis</b>

## RESEARCH ACTIVITY:

---

### Main topics of my research activity

My research field is in experimental nuclear physics and particle physics. It is mainly focused on:

1. **Data analysis and set-up preparation of nuclear physics experiments, in particular dynamical dipole gamma-ray emission in N/Z-asymmetric fusion reactions:** I contributed, with major responsibility, to the study of the giant dipole resonance in asymmetric fusion evaporation reactions to provide the information on the nuclear equation of state.
2. **R&D of new scintillator detectors for nuclear physics experiments:** I worked, with major responsibility, on the R&D of new scintillator detectors for nuclear physics experiments to be used in different experimental set-up, such as AGATA and GALILEO.
3. **Test for the JUNO experiment large PMT electronics:** I developed, under my responsibility, a small JUNO experiment demonstrator to test the electronics boards and I wrote various scripts to analyze the data acquired during the tests..
4.  **$\pi$  and K identification with TOP detector of Belle2 experiment and replacement of top detector PMT with SiPM:** I'm currently working on the optimization of the TOP detector in order to reach the design  $\pi$ -K separation, with both data and simulations.

### Data analysis and set-up preparation of nuclear physics experiments, in particular dynamical dipole gamma-ray emission in N/Z-asymmetric fusion reactions

During my master thesis, I characterized an array of BaF<sub>2</sub> scintillators (called Helena array). The packing and the optical contact of each detector were redone to improve the energy and time resolution of the detectors. The PMT and the voltage divider performances were accurately tested. An especially designed module for BaF<sub>2</sub> detectors (BAFPRO) was developed in the University of Milan and was tested with the Helena array. This array was used in two different experimental campaigns at Legnaro National Laboratories, Italy.

During my PhD, I worked on three different topics: 1) the analysis of the experiment data on the dynamical dipole emission in N/Z asymmetric reactions, 2) the proposal, the set-up preparation and the preliminary data analysis of an experiment focused on the measurement of the isospin mixing in <sup>80</sup>Zr, 3) the characterization of an array of large volume LaBr<sub>3</sub>:Ce detectors.

The dynamical dipole emission was measured in <sup>132</sup>Ce using the fusion-evaporation reaction <sup>16</sup>O + <sup>116</sup>Sn at 12 MeV/nucleon. A N/Z asymmetry between the projectile and the target in heavy-ion fusion reactions is expected to form a time dependent dipole moment which is associated to a gamma radiation emission. This emission is called dynamical dipole. It is a pre-equilibrium emission and it allows to study the dynamic of the fusion process. As the reaction dynamics is related to the symmetry term of the nuclear equation of state, experimental data can provide strong constraints in its value. Theoretical calculation were also performed for the measured reaction and also for other cases with larger N/Z asymmetry between projectile and target.

The isospin mixing in <sup>80</sup>Zr was measured at T=2.4 MeV to study its dependence as a function of the temperature. I was the spokesperson of the experiment and I contributed to the preparation of the experimental setup which consisted on the AGATA array (an array of segmented HPGe detectors) and an array of large volume LaBr<sub>3</sub>:Ce detectors. In particular, I worked on the characterization of the LaBr<sub>3</sub>:Ce detectors. After the experiment, I contributed to the initial part of the data analysis which was focused to the individuation of the reaction channels. In the experiment, the module LABR-PRO (an NIM unit based on the previously developed BAFPRO) optimized for LaBr<sub>3</sub>:Ce scintillator was first tested and then used.

The performances of large volume (3.5" x 8") LaBr<sub>3</sub>:Ce detectors were studied in term of energy resolution and linearity from 5.6 keV up to 22 MeV. The signal shape was also studied as a function of the deposited energy. The response of the detectors (using LABRPRO unit and a digitizer) was also studied as a function of the count rate from few kHz up to 250 kHz.

### R&D of new scintillator detectors for nuclear physics experiments

During GANAS postdoctoral fellow I worked also on the position sensitivity of large volume LaBr<sub>3</sub>:Ce. The

position sensitivity was studied both in average and on event by event basis. The used detector was a 3" x 3" LaBr<sub>3</sub>:Ce scintillator with reflective/diffusive surfaces. Furthermore the response of LaBr<sub>3</sub>:Ce of a proton beam from 70 MeV up to 230 MeV was studied. The linear response of the detector is a very important parameter to obtain the proton quenching value, for this reason the non-linearity of the PMT was accurately studied. I also worked on the characterization of new scintillators, such as CLYC (Cs<sub>2</sub>LiYCl<sub>6</sub>), that are suitable for gamma and neutron detection, GYGAG, that is a ceramic scintillator, CeBr<sub>3</sub> and SrI<sub>2</sub>:Eu. The  $\beta^-$ -decay continuous spectrum of <sup>138</sup>La was measured exploiting the internal activity of LaBr<sub>3</sub>:Ce detectors.

During my scientific and technical fellow in Krakow (Poland) I worked with the PARIS detectors characterization and I continued the measurements about the protons on a large volume LaBr<sub>3</sub>:Ce. PARIS detectors are phosphors of LaBr<sub>3</sub>:Ce and NaI and they were used in different experiments.

In the joint CAEN and INFN postdoctoral fellowship worked on the digital processing of different kinds of scintillators detectors, such as LaBr<sub>3</sub>:Ce, CLYC, BaF<sub>2</sub>. I compared the performances of this detector, in term of time, energy resolution and pulse shape discrimination, with analog and digital processing methods. The activity was performed in collaboration with CAEN s.p.a. Viareggio, Italy. I worked in the characterization of CLYC scintillators in order to understand if they are suitable for nuclear physics experiments. I continued the measurements  $\beta^-$ -decay continuous spectrum of <sup>138</sup>La, using an HPGe detector in coincidence with a LaBr<sub>3</sub>:Ce to reduce the effect of the background.

### Test for the JUNO experiment large PMT electronics

I worked on the Jiangmen Underground Neutrino Observatory (JUNO) experiment electronics. JUNO is based on a large liquid scintillator neutrino detector under construction in the south of China and its aim is the determination of the neutrino mass hierarchy. In particular I worked on the development and test of the first prototypes of the Global Control Unit (GCU) board. I checked the reliability on the different prototypes of the GCU boards. I mainly worked on the set-up of a small JUNO demonstrator, composed of ~ 20 l of liquid scintillator and 48 small PMTs (2" x 2"). I developed the system: following the mounting procedure, preparing the liquid scintillator, testing all the 48 PMTs with commercial electronic. This JUNO demonstrator is used to test the whole electronics chain and the trigger algorithms with signals coming from cosmic rays. The demonstrator is used for the long term test of the electronics and the data of the tests were analyzed using the scripts that I realized for this purpose.

### $\pi$ and K identification with TOP detector of Belle2 experiment and replacement of TOP detector PMT with SiPM

I started to work in Belle2 experiment few months ago. Up to now, my work consists of two different parts: simulation and data analysis to identify  $\pi$  and  $\kappa$  in the TOP detector and on test of SiPM as a possible substitutes of PMT for the TOP detector.

## PUBLICATIONS:

---

### 49 Peer review publications on international journals.

The publication that are most relevant for my research work are indicated with a \* near the number. Publications 1) – 11) are related to my research activity and most of the work was done by myself. Publications 12) and 13) are related to physics case in which my contribution was relevant. It was related to the experiment's preparation the experimental set up and part of the data analysis. Regarding the other publications my contribution was related in particular to the preparation of the experimental set up.

#### \* 1) "Characterization of large volume 3.5"x8" LaBr<sub>3</sub>:Ce detectors"

A. Giaz, L. Pellegrini, S. Riboldi, F. Camera, N. Blasi, C. Boiano, A. Bracco, S. Brambilla, S. Ceruti, S. Coelli, F.C.L. Crespi, b, M. Csatlós, S. Frega, J. Gulyàs, A. Krasznahorkay, S. Lodetti, B. Million, A. Owens, F. Quarati, 1, L. Stuhl, O. Wieland.

Nuclear Instruments and Methods in Physics Research A 729 (2013) 910–921



*\* 2) "Measurement of dynamical dipole  $\gamma$ -ray emission in the N/Z-asymmetric fusion reaction  $^{016}\text{O}+^{116}\text{Sn}$  at 12 MeV/nucleon"*

A. Giaz, A. Corsi, S. Barlini, V. L. Kravchuk, O. Wieland, M. Colonna, F. Camera, A. Bracco, R. Alba, G. Baiocco, L. Bardelli, G. Benzoni, M. Bini, N. Blasi, S. Brambilla, M. Bruno, G. Casini, M. Ciemala, M. Cinausero, F. C. L. Crespi, M. D'Agostino, M. Degerlier, M. Di Toro, F. Gramegna, M. Kmiecik, S. Leoni, C. Maiolino, A. Maj, T. Marchi, K. Mazurek, S. Myalski, B. Million, D. Montanari, L. Morelli, R. Nicolini, G. Pasquali, S. Piantelli, A. Ordine, G. Poggi, V. Rizzi, C. Rizzo, S. Sami, D. Santonocito, and V. Vandone.  
Physical Review C 90, (2014) 014609

*\* 3) "Investigation on gamma-ray position sensitivity at 662 keV in a spectroscopic 3" x 3" LaBr3:Ce scintillator"*

A. Giaz, F. Camera, F. Birocchi, N. Blasi, C. Boiano, S. Brambilla, S. Coelli, C. Fiorini, c, A. Marone, B. Million, S. Riboldi, b, O. Wieland.  
Nuclear Instruments and Methods in Physics Research A 772 (2015) 103–111

*\* 4) "Preliminary investigation of scintillator materials properties:  $\text{SrI}_2\text{:Eu}$ ,  $\text{CeBr}_3$  and GYGAG:Ce for gamma rays up to 9 MeV"*

A. Giaz, G. Hull, V. Fossati, N. Cherepy, F. Camera, N. Blasi, S. Brambilla, S. Coelli, B. Million and S. Riboldi.  
Nuclear Instruments and Methods A 804, (2015), 212.

*\* 5) "Measurement of  $\beta$  --decay continuum spectrum of  $^{138}\text{La}$ "*

A. Giaz, G. Gosta, F. Camera, S. Riboldi, N. Blasi, A. Bracco, S. Brambilla and B. Million.  
EPL (Europhysics Letters), 110, (2015), Number 4.

*\* 6) "The CLYC-6 and CLYC-7 response to  $\gamma$ -rays, fast and thermal neutrons"*

A. Giaz, L. Pellegrini, F. Camera, N. Blasi, S. Brambilla, S. Ceruti, B. Million, S. Riboldi, C. Cazzaniga, G. Gorini, M. Nocente A. Pietropaolo, M. Pillon, M. Rebai, M. Tardocchi.  
Nuclear Instruments and Methods, A 810, (2016), 132.

*\* 7) "Fast neutron measurements with  $^7\text{Li}$  and  $^6\text{Li}$  enriched CLYC scintillators"*

A. Giaz, N. Blasi, C. Boiano, S. Brambilla, F. Camera, C. Cattadori, S. Ceruti, F. Gramegna, T. Marchi, I. Mattei, A. Mentana, B. Million, L. Pellegrini, M. Rebai, S. Riboldi, F. Salamida, M. Tardocchi  
Nuclear Instruments and Methods, A 825, (2016), 51.

*\* 8) "Measurement of  $\beta$ -decay continuum spectrum of  $^{138}\text{La}$ "*

A. Giaz.  
Nuovo Cimento della Societa Italiana di Fisica C, **38**, (2015), 62.

*\* 9) "Position sensitivity in large spectroscopic LaBr3:Ce crystals for Doppler broadening correction."*

N. Blasi, A. Giaz, C. Boiano, S. Brambilla, F. Camera, B. Million, S. Riboldi.  
Nuclear instruments & methods in physics research. SECTION A, 839, (2016), 23.

*\*10) "Fast neutron detection efficiency of  $^6\text{Li}$  and  $^7\text{Li}$  enriched CLYC scintillators using an Am-Be source"*

N. Blasi, S. Brambilla, F. Camera, S. Ceruti, A. Giaz, L. Gini, F. Groppi, S. Manenti, A. Mentana, B. Million and S. Riboldi.  
Journal of Instrumentation, 13, (2018).

*\*11) "Response function and linearity for high energy  $\gamma$ -rays in large volume LaBr3:Ce detectors"*

G. Gosta, N. Blasi, F. Camera, B. Million, A. Giaz, O. Wieland, F.M. Rossi, H. Utsunomiya, T. Ari-izumi, D. Takenaka, D. Filipescu, I. Gheorghe.  
Nuclear instruments & methods in physics research. SECTION A, 879, (2018), 92.



*\* 12) "Measurement of isospin mixing at a finite temperature in  $^{80}\text{Zr}$  via giant dipole resonance decay"*

A. Corsi, O. Wieland, S. Barlini, A. Bracco, F. Camera, V. L. Kravchuk, G. Baiocco, L. Bardelli, G. Benzoni, M. Bini, N. Blasi, S. Brambilla, M. Bruno, G. Casini, M. Ciemala, M. Cinausero, F. C. L. Crespi, M. D'Agostino, M. Degerlier, A. Giaz, F. Gramegna, M. Kmiecik, S. Leoni, A. Maj, T. Marchi, K. Mazurek, W. Meczynski, B. Million, D. Montanari, L. Morelli, S. Myalski, A. Nannini, R. Nicolini, G. Pasquali, G. Poggi, V. Vandone, and G. Vannini

Physical Review C **84**, 041304(R) (2011)

*\* 13) "Isospin Mixing in  $\text{Zr}80$ : From Finite to Zero Temperature"*

S. Ceruti, F. Camera, A. Bracco, R. Avigo, G. Benzoni, N. Blasi, G. Bocchi, S. Bottoni, S. Brambilla, F. C. L. Crespi, A. Giaz, S. Leoni, A. Mentana, B. Million, A. I. Morales, R. Nicolini, L. Pellegrini, A. Pullia, S. Riboldi, O. Wieland, B. Birkenbach, D. Bazzacco, M. Ciemala, P. Désesquelles, J. Eberth, E. Farnea, A. Görgen, A. Gottardo, H. Hess, D. S. Judson, A. Jungclaus, M. Kmiecik, W. Korten, A. Maj, R. Menegazzo, D. Mengoni, C. Michelagnoli, V. Modamio, D. Montanari, S. Myalski, D. Napoli, B. Quintana, P. Reiter, F. Recchia, D. Rosso, E. Sahin, M. D. Salsac, P.-A. Söderström, O. Stezowski, Ch. Theisen, C. Ur, J. J. Valiente-Dobón, and M. Zieblinski.

Physics Review Letters **115**, (2015), 222502.

*14) "Conceptual design and infrastructure for the installation of the first AGATA sub-array at LNL"*

A. Gadea, E. Farnea, J. J. Valiente-Dobon, B. Million, D. Mengoni, D. Bazzacco, F. Recchia, A. Dewald, Th. Pissulla, W. Rother, G. de Angelis, ... A. Giaz et al.

Authors: 110

Nuclear Instruments and Methods in Physics Research A **654** (2011) 88–96

*15) "AGATA—Advanced Gamma Tracking Array"*

S. Akkoyun, ... A. Giaz, et al.

Authors: 385

Nuclear Instruments and Methods in Physics Research A **668** (2012) 26–58

*16) "Response of AGATA segmented HPGe detectors to gamma rays up to 15.1 MeV"*

F. C. L. Crespi, R. Avigo, F. Camera, S. Akkoyun, A. Ataç, D. Bazzacco, M. Bellato, G. Benzoni, N. Blasi, D. Bortolato, S. Bottoni, b, A. Bracco, b, S. Brambilla, B. Bruyneel, S. Ceruti, b, M. Ciemala, S. Coelli, J. Eberth, C. Fanin, E. Farnea, A. Gadea, A. Giaz, A. Gottardo, f, H. Hess, M. Kmiecik, S. Leoni, b, A. Maj, D. Mengoni, C. Michelagnoli, B. Million, D. Montanari, R. Nicolini, b, L. Pellegrini, b, F. Recchia, P. Reiter, S. Riboldi C. A. Ur, V. Vandone, J. J. Valiente-Dobon, O. Wieland, A. Wiens.

Nuclear Instruments and Methods in Physics Research A **705** (2013) 47–54

*17) "Global properties of K hindrance probed by the  $\gamma$  decay of the warm rotating  $^{174}\text{W}$  nucleus"*

V. Vandone, S. Leoni, A. Giaz, B. Million, R. Nicolini, L. Pellegrini, A. Pullia, O. Wieland, D. Bortolato, G. de Angelis, E. Calore, A. Gottardo, G. Maron, D. R. Napoli, D. Rosso, E. Sahin, J. J. Valiente-Dobon, D. Bazzacco, M. Bellato, E. Farnea, S. Lunardi, R. Menegazzo, D. Mengoni, P. Molini, C. Michelagnoli, D. Montanari, F. Recchia, C. A. Ur, A. Gadea, T. Hüyük, N. Cieplicka, A. Maj, M. Kmiecik, A. Ataç, S. Akkoyun, A. Kaskas, P.-A. Söderström, B. Birkenbach, B. Cederwall, P. J. Coleman-Smith, D. M. Cullen, P. Désesquelles, J. Eberth, A. Görgen, J. Grebosz, H. Hess, D. Judson, A. Jungclaus, N. Karkour, P. Nolan, A. Obertelli, P. Reiter, M. D. Salsac, O. Stezowski, Ch. Theisen, M. Matsuo, and E. Vigezzi

Physical Review C **88**, (2013) 034312

*18) "Identification and rejection of scattered neutrons in AGATA"*

M. Şenyiğit, A. Ataç, S. Akkoyun, A. Kaşkaş, D. Bazzacco, J. Nyberg, F. Recchia, S. Brambilla, F. Camera, F. C. L. Crespi, E. Farnea, A. Giaz, A. Gottardo, R. Kempsey, J. Ljungvall, D. Mengoni, C. Michelagnoli, B. Million, M. Palacz, L. Pellegrini, S. Riboldi, E. Şahin, P. A. Söderström, J. J. Valiente Dobon.

Nuclear Instruments and Methods in Physics Research A **735** (2014) 267–276

*19) "Development of a detector based on Silicon Drift Detectors for gamma-ray spectroscopy and imaging applications"*

P. Busca, A.D. Butt, C. Fiorini, A. Marone, M. Occhipinti, R. Peloso, R. Quaglia, L. Bombelli, G. Giacomini, C. Piemonte, F. Camera, A. Giaz, B. Million, N. Nelms and B. Shortt  
Journal of Instrumentation, 9 (2014) C05005

*20) "Isospin Character of Low-Lying Pygmy Dipole States in Pb208 via Inelastic Scattering of O17 Ions"*

F. C. L. Crespi, A. Bracco, R. Nicolini, D. Mengoni, L. Pellegrini, E. G. Lanza, S. Leoni, A. Maj, M. Kmiecik, R. Avigo, G. Benzoni, N. Blasi, C. Boiano, S. Bottoni, S. Brambilla, F. Camera, S. Ceruti, A. Giaz, B. Million, A. I. Morales, V. Vandone, O. Wieland, P. Bednarczyk, M. Ciemala, J. Grebosz, M. Krzysiek, K. Mazurek, M. Zieblinski, D. Bazzacco, M. Bellato, B. Birkenbach, D. Bortolato, E. Calore, B. Cederwall, L. Charles, G. de Angelis, P. Désesquelles, J. Eberth, E. Farnea, A. Gadea, A. Görgen, A. Gottardo, R. Isocrate, J. Jolie, A. Jungclaus, N. Karkour, W. Korten, R. Menegazzo, C. Michelagnoli, P. Molini, D. R. Napoli, A. Pullia, F. Recchia, P. Reiter, D. Rosso, E. Sahin, M. D. Salsac, B. Siebeck, S. Siem, J. Simpson, P.-A. Söderström, O. Stezowski, Ch. Theisen, C. Ur, and J. J. Valiente-Dobón.  
Physics Review Letter 113, (2014) 012501.

*21) "Pygmy dipole resonance in 124 Sn populated by inelastic scattering of 17 O"*

L. Pellegrini, A. Bracco, F.C.L. Crespi, S. Leoni, F. Camera, E.G. Lanza, M. Kmiecik, A. Maj, R. Avigo, G. Benzoni, N. Blasi, C. Boiano, S. Bottoni, S. Brambilla, S. Ceruti, A. Giaz, B. Million, A.I. Morales, R. Nicolini, V. Vandone, O. Wieland, D. Bazzacco, P. Bednarczyk, M. Bellato, B. Birkenbach, D. Bortolato, B. Cederwall, L. Charles, M. Ciemala, G. De Angelis, P. Désesquelles, J. Eberth, E. Farnea, A. Gadea, R. Gernhäuser, A. Görgen, A. Gottardo, J. Grebosz, H. Hess, R. Isocrate, J. Jolie, D. Judson, A. Jungclaus, N. Karkour, M. Krzysiek, E. Litvinova, S. Lunardi, K. Mazurek, D. Mengoni, C. Michelagnoli, R. Menegazzo, P. Molini, D.R. Napoli, A. Pullia, B. Quintana, F. Recchia, P. Reiter, M.D. Salsac, B. Siebeck, S. Siem, J. Simpson, P.-A. Söderström, O. Stezowski, Ch. Theisen, C. Ur, J.J. Valiente Dobon, M. Zieblinski.  
Physics Letters B 738 (2014) 519–523

*22) "Response of LaBr3(Ce) scintillators to 14 MeV fusion neutrons"*

C. Cazzaniga, M. Nocente, M. Tardocchi, M. Rebai, M. Pillon, F. Camera, A. Giaz, L. Pellegrini, G. Gorini  
Nuclear Instruments and Methods in Physics Research A 778 (2015) 20–25

*23) "Giant Dipole Resonance built on hot rotating nuclei produced during evaporation of light particles from 88Mo compound nucleus"*

M. Ciemala, M. Kmiecik, A. Maj, K. Mazurek, A. Bracco, V.L. Kravchuk, G. Casini, S. Barlini, G. Baiocco, L. Bardelli, P. Bednarczyk, G. Benzoni, M. Bini, N. Blasi, S. Brambilla, M. Bruno, F. Camera, S. Carboni, M. Cinausero, A. Chbihi, M. Chiari, A. Corsi, F.C.L. Crespi, M. D'Agostino, M. Degerlier, B. Fornal, A. Giaz, F. Gramegna, M. Krzysiek, S. Leoni, T. Marchi, M. Matejska-Minda, I. Mazumdar, W. Meczynski, B. Million, D. Montanari, L. Morelli, S. Myalski, A. Nannini, R. Nicolini, G. Pasquali, S. Piantelli, G. Prete, O.J. Roberts, Ch. Schmitt, J. Styczen, B. Szpak, S. Valdré, B. Wasilewska, O. Wieland, J.P. Wieleczko, M. Zieblinski, J. Dudek, and N. Dinh Dang  
Physical Review C 91, (2015) 054313.

*24) "Spectroscopy of the neutron-rich actinide nucleus U240 following multinucleon-transfer reactions"*

B. Birkenbach, A. Vogt, K. Geibel, F. Recchia, P. Reiter, J. J. Valiente-Dobón, D. Bazzacco, M. Bowry, A. Bracco, B. Bruyneel, L. Corradi, F. C. L. Crespi, G. de Angelis, P. Désesquelles, J. Eberth, E. Farnea, E. Fioretto, A. Gadea, A. Gengelbach, A. Giaz, A. Görgen, A. Gottardo, J. Grebosz, H. Hess, P. R. John, J. Jolie, D. S. Judson, A. Jungclaus, W. Korten, S. Lenzi, S. Leoni, S. Lunardi, R. Menegazzo, D. Mengoni, C. Michelagnoli, T. Mijatović, G. Montagnoli, D. Montanari, D. Napoli, L. Pellegrini, G. Pollaro, A. Pullia, B. Quintana, F. Radeck, D. Rosso, E. Şahin, M. D. Salsac, F. Scarlassara, P.-A. Söderström, A. M. Stefanini, T. Steinbach, O. Stezowski, S. Szilner, B. Szpak, Ch. Theisen, C. Ur, V. Vandone, and A. Wiens.  
Physics Review C 92, (2015) 044319.

*25) "Light and heavy transfer products in Xe136+U238 multinucleon transfer reactions"*

A. Vogt, B. Birkenbach, P. Reiter, L. Corradi, T. Mijatović, D. Montanari, S. Szilner, D. Bazzacco, M. Bowry,

A. Bracco, B. Bruyneel, F. C. L. Crespi, G. de Angelis, P. Désesquelles, J. Eberth, E. Farnea, E. Fioretto, A. Gadea, K. Geibel, A. Gengelbach, A. Giaz, A. Görgen, A. Gottardo, J. Grebosz, H. Hess, P. R. John, J. Jolie, D. S. Judson, A. Jungclaus, W. Korten, S. Leoni, S. Lunardi, R. Menegazzo, D. Mengoni, C. Michelagnoli, G. Montagnoli, D. Napoli, L. Pellegri, G. Pollarolo, A. Pullia, B. Quintana, F. Radeck, F. Recchia, D. Rosso, E. Şahin, M. D. Salsac, F. Scarlassara, P.-A. Söderström, A. M. Stefanini, T. Steinbach, O. Stezowski, B. Szpak, Ch. Theisen, C. Ur, J. J. Valiente-Dobón, V. Vandone, and A. Wiens.  
Physics Review C 92, (2015) 024619.

*26) "Multitude of 2+ discrete states in Sn124 observed via the (O17, O'17 $\gamma$ ) reaction: Evidence for pygmy quadrupole states"*

L. Pellegri, A. Bracco, N. Tsoneva, R. Avigo, G. Benzoni, N. Blasi, S. Bottoni, F. Camera, S. Ceruti, F. C. L. Crespi, A. Giaz, S. Leoni, H. Lenske, B. Million, A. I. Morales, R. Nicolini, O. Wieland, D. Bazzacco, P. Bednarczyk, B. Birkenbach, M. Ciemala, G. de Angelis, E. Farnea, A. Gadea, A. Görgen, A. Gottardo, J. Grebosz, R. Isocrate, M. Kmiecik, M. Krzysiek, S. Lunardi, A. Maj, K. Mazurek, D. Mengoni, C. Michelagnoli, D. R. Napoli, F. Recchia, B. Siebeck, S. Siem, C. Ur, and J. J. Valiente-Dobón.  
Physics Review C 92, (2015) 014330.

*27) "1- and 2+ discrete states in Zr90 populated via the (O17,O'17 $\gamma$ ) reaction"*

F. C. L. Crespi, A. Bracco, R. Nicolini, E. G. Lanza, A. Vitturi, D. Mengoni, S. Leoni, G. Benzoni, N. Blasi, C. Boiano, S. Bottoni, S. Brambilla, F. Camera, A. Corsi, A. Giaz, B. Million, L. Pellegri, V. Vandone, O. Wieland, P. Bednarczyk, M. Ciemala, M. Kmiecik, M. Krzysiek, A. Maj, D. Bazzacco, M. Bellato, B. Birkenbach, D. Bortolato, E. Calore, B. Cederwall, G. de Angelis, P. Désesquelles, J. Eberth, E. Farnea, A. Gadea, A. Görgen, A. Gottardo, H. Hess, R. Isocrate, J. Jolie, A. Jungclaus, R. S. Kempley, M. Labiche, R. Menegazzo, C. Michelagnoli, P. Molini, D. R. Napoli, A. Pullia, B. Quintana, F. Recchia, P. Reiter, E. Sahin, S. Siem, P.-A. Söderström, O. Stezowski, Ch. Theisen, C. Ur, and J. J. Valiente-Dobón.  
Physics Review C 91, (2015) 024323.

*28) "Pygmy dipole resonance in <sup>140</sup>Ce via inelastic scattering of <sup>17</sup>O"*

M. Krzysiek, M. Kmiecik, A. Maj, P. Bednarczyk, A. Bracco, F. C. L. Crespi, E. G. Lanza, E. Litvinova, N. Paar, R. Avigo, D. Bazzacco, G. Benzoni, B. Birkenbach, N. Blasi, S. Bottoni, S. Brambilla, F. Camera, S. Ceruti, M. Ciemala, G. de Angelis, P. Désesquelles, J. Eberth, E. Farnea, A. Gadea, A. Giaz, A. Görgen, A. Gottardo, J. Grębosz, H. Hess, R. Isocrate, A. Jungclaus, S. Leoni, J. Ljungvall, S. Lunardi, K. Mazurek, R. Menegazzo, D. Mengoni, C. Michelagnoli, B. Million, A. I. Morales, D. R. Napoli, R. Nicolini, L. Pellegri, A. Pullia, B. Quintana, F. Recchia, P. Reiter, D. Rosso, M. D. Salsac, B. Siebeck, S. Siem, P.-A. Söderström, C. Ur, J. J. Valiente-Dobon, O. Wieland, and M. Ziębliński  
Physics Review C 93, (2016) 044330.

*29) "High-spin structure of <sup>134</sup>Xe"*

A. Vogt, B. Birkenbach, P. Reiter, A. Blazhev, M. Siciliano, J. J. Valiente-Dobón, C. Wheldon, D. Bazzacco, M. Bowry, A. Bracco, B. Bruyneel, R. S. Chakrawarthy, R. Chapman, D. Cline, L. Corradi, F. C. L. Crespi, M. Cromaz, G. de Angelis, J. Eberth, P. Fallon, E. Farnea, E. Fioretto, S. J. Freeman, A. Gadea, K. Geibel, W. Gelletly, A. Gengelbach, A. Giaz, A. Görgen, A. Gottardo, A. B. Hayes, H. Hess, H. Hua, P. R. John, J. Jolie, A. Jungclaus, W. Korten, I. Y. Lee, S. Leoni, X. Liang, S. Lunardi, A. O. Macchiavelli, R. Menegazzo, D. Mengoni, C. Michelagnoli, T. Mijatović, G. Montagnoli, D. Montanari, D. Napoli, C. J. Pearson, L. Pellegri, Zs. Podolyák, G. Pollarolo, A. Pullia, F. Radeck, F. Recchia, P. H. Regan, E. Şahin, F. Scarlassara, G. Sletten, J. F. Smith, P.-A. Söderström, A. M. Stefanini, T. Steinbach, O. Stezowski, S. Szilner, B. Szpak, R. Teng, C. Ur, V. Vandone, D. Ward, D. D. Warner, A. Wiens, and C. Y. Wu.  
Physics Review C 93, (2016) 054325.

*30) "Charged particle decay of hot and rotating <sup>88</sup>Mo nuclei in fusion-evaporation reactions"*

S. Valdré, S. Piantelli, G. Casini, S. Barlini, S. Carboni, M. Ciemala, M. Kmiecik, A. Maj, K. Mazurek, M. Cinausero, F. Gramegna, V. L. Kravchuk, L. Morelli, T. Marchi, G. Baiocco, L. Bardelli, P. Bednarczyk, G. Benzoni, M. Bini, N. Blasi, A. Bracco, S. Brambilla, M. Bruno, F. Camera, A. Chbihi, A. Corsi, F. C. L. Crespi, M. D'Agostino, M. Degerlier, D. Fabris, B. Fornal, A. Giaz, M. Krzysiek, S. Leoni, M. Matejska-Minda, I. Mazumdar, W. Męczyński, B. Million, D. Montanari, S. Myalski, R. Nicolini, A. Olmi, G. Pasquali, G. Prete, O.

J. Roberts, J. Styczeń, B. Szpak, B. Wasilewska, O. Wieland, J. P. Wieleczko, and M. Ziębliński.  
Physics Review C 93, (2016) 034617.

*31) "Relativistic Coulomb excitation of Kr 88"*

Moschner K., Blazhev A., Jolie J., Warr N., Boutachkov P., Bednarczyk P., Sieja K., Algora A., Ameil F., Bentley M.A., Brambilla S., Braun N., Camera F., Cederkäll J., Corsi A., Danchev M., Dijulio D., Fahlander C., Gerl J., Giaz A., Golubev P., Górski M., Grebosz J., Habermann T., Hackstein M., Hoischen R., Kojouharov I., Kurz N., Mărginean N., Merchán E., Möller T., Naqvi F., Nara Singh B.S., Nociforo C., Pietralla N., Pietri S., Podolyák Zs., Prochazka A., Reese M., Reiter P., Rudigier M., Rudolph D., Sava T., Schaffner H., Scruton L., Taprogge J., Thomas T., Weick H., Wendt A., Wieland O., Wollersheim H.-J.  
Physical Review C 94, (2016), 054323.

*32) "Response function of single crystal synthetic diamond detectors to 1-4 MeV neutrons for spectroscopy of D plasmas."*

M. Rebai, L. Giacomelli, A. Milocco, M. Nocente, D. Rigamonti, M. Tardocchi, F. Camera, C. Cazzaniga, Z. J. Chen, T. F. Du, T. S. Fan, Giaz A., Z. M. Hu, T. Marchi, X. Y. Peng, G. Gorini, and JET Contributors (2016).  
Review of scientific instruments, 87, (2016), 11D823.

*33) "Superdeformed and Triaxial States in Ca 42"*

Hadyńska-Kłk K., Napiorkowski P.J., Zielińska M., ..., Giaz A., et al.  
Physical review letters, 117, (2016), 062501.

*34) "Experimental study of the isovector giant dipole resonance in Zr 80 and Rb 81."*

Ceruti S., Camera F., Bracco A., Mentana A., Avigo R., Benzoni G., Blasi N., Bocchi G., Bottoni S., Brambilla S., Crespi F.C.L., Giaz A., Leoni S., Million B., Morales A.I., Nicolini R., Pellegrini L., Riboldi S., Wieland O., Bazzacco D., Ciemala M., Farnea E., Gottardo A., Kmiecik M., Maj A., Mengoni D., Michelagnoli C., Modamio V., Montanari D., Napoli D., Recchia F., Sahin E., Ur C., Valiente-Dobón J.J., Wasilewska B., Zieblinski M.  
Physical review C, 95, (2016), 014312.

*35) "Isomers and high-spin structures in the N=81 isotones Xe135 and Ba137"*

Vogt A., Birkenbach B., Reiter P., Blazhev A., Siciliano M., Hadyńska-Kłk K., Valiente-Dobón J. J., Wheldon C., Teruya E., Yoshinaga N., Arnschuld K., Bazzacco D., Bowry M., Bracco A., Bruyneel B., Chakrawarthy R. S., Chapman R., Cline D., Corradi L., Crespi F. C. L., Cromaz M., de Angelis G., Eberth J., Fallon P., Farnea E., Fioretto E., Freeman S. J., Fu B., Gadea A., Geibel K., Gelletly W., Gengelbach A., Giaz A., Gorgen A., Gottardo A., Hayes A. B., Hess H., Hirsch R., Hua H., John P. R., Jolie J., Jungclaus A., Kaya L., Korten W., Lee I. Y., Leoni S., Lewandowski L., Liang X., Lunardi S., Macchiavelli A. O., Menegazzo R., Mengoni D., Michelagnoli C., Mijatović T., Montagnoli G., Montanari D., Müller-Gatermann C., Napoli D., Pearson C. J., Pellegrini L., Podolyák Zs., Pollaro G., Pullia A., Queiser M., Radeck F., Recchia F., Regan P. H., Rosiak D., Saed-Samii N., Şahin E., Scarlassara F., Schneiders D., Seidlitz M., Siebeck B., Sletten G., Smith J. F., Söderström P.-A., Stefanini A. M., Steinbach T., Stezowski O., Szilner S., Szpak B., Teng R., Ur C., Vandone V., Warner D. D., Wiens A., Wu C. Y., Zell K. O.  
Physical review C, 95, (2017), 024316

*36) "Observation of isoscalar and isovector dipole excitations in neutron-rich 200"*

N.Nakatsuka, H.Baba, T.Aumann, R.Avigo, S.R.Banerje, A.Bracco, C.Caesar, F.Camera, S.Ceruti, S.Chen, V.Derya, P.Doornenbal, A.Giaz, A.Horvat, K.Ieki, T.Inakura, N.Imai, T.Kawabata, N.Kobayashi, Y.Kondo, S.Koyama, M.Kurata-Nishimura, S.Masuoka, M.Matsushita, S.Michimasa, B.Million, T.Motobayashi, T.Murakami, T.Nakamura, T.Ohnishi, H.J.Ong, S.Ota, H.Otsu, T.Ozaki, A.Saito, H.Sakurai, H.Scheit, F.Schindler, P.Schrock, Y.Shigaj, M.Shikata, S.Shimoura, D.Steppenbeck, T.Sumikama, I.Syndikus, H.Takeda, S.Takeuchi, A.Tamii, R.Taniuchi, Y.Togano, J.Tscheuschner, J.Tsubota, H.Wang, O.Wieland, K.Wimmer, Y.Yamaguchi, K.Yoneda, J.Zenihiro.  
Physics Letters B, 768, (2017), 387.

*37) "High-spin structures in 132Xe and 133Xe and evidence for isomers along the N=79 isotones"*

A. Vogt, M. Siciliano, B. Birkenbach, P. Reiter, K. Hadyńska-Kłk, C. Wheldon, J. J. Valiente-Dobón, E. Teruya,



N. Yoshinaga, K. Arnsward, D. Bazzacco, A. Blazhev, A. Bracco, B. Bruyneel, R. S. Chakrawarthy, R. Chapman, D. Cline, L. Corradi, F. C. L. Crespi, M. Cromaz, G. de Angelis, J. Eberth, P. Fallon, E. Farnea, E. Fioretto, C. Fransen, S. J. Freeman, B. Fu, A. Gadea, W. Gelletly, A. Giaz, A. Görgen, A. Gottardo, A. B. Hayes, H. Hess, R. Hetzenegger, R. Hirsch, H. Hua, P. R. John, J. Jolie, A. Jungclaus, V. Karayonchev, L. Kaya, W. Korten, I. Y. Lee, S. Leoni, X. Liang, S. Lunardi, A. O. Macchiavelli, R. Menegazzo, D. Mengoni, C. Michelagnoli, T. Mijatović, G. Montagnoli, D. Montanari, C. Müller-Gatermann, D. Napoli, C. J. Pearson, Zs. Podolyák, G. Pollarolo, A. Pullia, M. Queiser, F. Recchia, P. H. Regan, J.-M. Régis, N. Saed-Samii, E. Şahin, F. Scarlassara, M. Seidlitz, B. Siebeck, G. Sletten, J. F. Smith, P.-A. Söderström, A. M. Stefanini, O. Stezowski, S. Szilner, B. Szpak, R. Teng, C. Ur, D. D. Warner, K. Wolf, C. Y. Wu, and K. O. Zell.  
Phys. Rev. C 96, (2017), 024321.

### 38) *“Charge reconstruction in large-area photomultipliers”*

M. Grassi, M. Montuschi, M. Baldoncini, F. Mantovani, B. Ricci, G. Andronico, V. Antonelli, M. Bellato, E. Bernieri, A. Brigatti, R. Brugnera, A. Budano, M. Buscemi, S. Bussino, R. Caruso, D. Chiesa, D. Corti, F. dal Corso, X.F. Ding, S. Dusini, A. Fabbri, G. Fiorentini, R. Ford, A. Formozov, G. Galet, A. Garfagnini, M. Giammarchi, A. Giaz, A. Insolia, R. Isocrate, I. Lippi, F. Longhitano, D.L. Presti, P. Lombardi, F. Marini, S. Mari, C. Martellini, E. Meroni, M. Mezzetto, L. Miramonti, S. Monforte, M. Nastasi, F. Ortica, A. Paoloni, S. Parmeggiano, D. Pedretti, N. Pelliccia, R. Pompilio, E. Previtali, G. Ranucci, A.C. Re, A. Romani, P. Saggese, G. Salamanna, F.H. Sawy, G. Settanta, M. Sisti, C. Sirignano, M. Spinetti, L. Stanco, V. Strati, G. Verde, L. Votano.

Journal of Instrumentation, 13, (2018), P02008.

### 39) *“Quadrupole collectivity in Ca 42 from low-energy Coulomb excitation with AGATA”*

K. Hadyńska-Klęk, P. J. Napiorkowski, M. Zielińska, J. Srebrny, A. Maj, F. Azaiez, J. J. Valiente Dobón, M. Kicińska-Habior, F. Nowacki, H. Naïdja, B. Bounthong, T. R. Rodríguez, G. de Angelis, T. Abraham, G. Anil Kumar, D. Bazzacco, M. Bellato, D. Bortolato, P. Bednarczyk, G. Benzoni, L. Berti, B. Birkenbach, B. Bruyneel, S. Brambilla, F. Camera, J. Chavas, B. Cederwall, L. Charles, M. Ciemala, P. Cocconi, P. Coleman-Smith, A. Colombo, A. Corsi, F. C. L. Crespi, D. M. Cullen, A. Czermak, P. Désesquelles, D. T. Doherty, B. Dulny, J. Eberth, E. Farnea, B. Fornal, S. Franchoo, A. Gadea, A. Giaz, A. Gottardo, X. Grave, J. Grębosz, A. Görgen, M. Gulmini, T. Habermann, H. Hess, R. Isocrate, J. Iwanicki, G. Jaworski, D. S. Judson, A. Jungclaus, N. Karkour, M. Kmiecik, D. Karpiński, M. Kisieliński, N. Kondratyev, A. Korichi, M. Komorowska, M. Kowalczyk, W. Korten, M. Krzysiek, G. Lehaut, S. Leoni, J. Ljungvall, A. Lopez-Martens, S. Lunardi, G. Maron, K. Mazurek, R. Menegazzo, D. Mengoni, E. Merchán, W. Męczyński, C. Michelagnoli, B. Million, S. Myalski, D. R. Napoli, M. Niikura, A. Obertelli, S. F. Özmen, M. Palacz, L. Próchniak, A. Pullia, B. Quintana, G. Rampazzo, F. Recchia, N. Redon, P. Reiter, D. Rosso, K. Rusek, E. Sahin, M.-D. Salsac, P.-A. Söderström, I. Stefan, O. Stęzowski, J. Styczeń, Ch. Theisen, N. Toniolo, C. A. Ur, R. Wadsworth, B. Wasilewska, A. Wiens, J. L. Wood, K. Wrzosek-Lipska, and M. Ziębliński.

Phys. Rev. C 97, (2018) 024326.

### 40) *“High-spin structure in the transitional nucleus Xe 131: Competitive neutron and proton alignment in the vicinity of the N=82 shell closure”*

L. Kaya, A. Vogt, P. Reiter, M. Siciliano, B. Birkenbach, A. Blazhev, L. Coraggio, E. Teruya, N. Yoshinaga, K. Higashiyama, K. Arnsward, D. Bazzacco, A. Bracco, B. Bruyneel, L. Corradi, F.C.L. Crespi, G. De Angelis, J. Eberth, E. Farnea, E. Fioretto, C. Fransen, B. Fu, A. Gadea, A. Gargano, A. Giaz, A. Görgen, A. Gottardo, K. Hadyńska-Klęk, H. Hess, R. Hetzenegger, R. Hirsch, N. Itaco, P.R. John, J. Jolie, A. Jungclaus, W. Korten, S. Leoni, L. Lewandowski, S. Lunardi, R. Menegazzo, D. Mengoni, C. Michelagnoli, T. Mijatović, G. Montagnoli, D. Montanari, C. Müller-Gatermann, D. Napoli, Z. Podolyák, G. Pollarolo, A. Pullia, M. Queiser, F. Recchia, D. Rosiak, N. Saed-Samii, E. Şahin, F. Scarlassara, D. Schneiders, B. Seidlitz, M.a, Siebeck, B.a, Smith, J.F.w, Söderström, P.-A.x, Stefanini, A.M.c, Steinbach, T.a, Stezowski, O.y, Szilner, S.t, Szpak, C. Ur, J.J. Valiente-Dobón, K. Wolf, K.O. Zell.

Phys. Rev. C 98, (2018) 014309.

### 41) *“Millisecond 23/2+ isomers in the N=79 isotones 133Xe and 135Ba”*

L. Kaya, A. Vogt, P. Reiter, C. Müller-Gatermann, M. Siciliano, L. Coraggio, N. Itaco, A. Gargano, K. Arnsward, D. Bazzacco, B. Birkenbach, A. Blazhev, A. Bracco, B. Bruyneel, L. Corradi, F. C. L. Crespi, G. de Angelis, M.

Droste, J. Eberth, E. Farnea, E. Fioretto, C. Fransen, A. Gadea, A. Giaz, A. Görgen, A. Gottardo, K. Hadyńska-Klęk, H. Hess, R. Hetzenegger, R. Hirsch, P. R. John, J. Jolie, A. Jungclaus, W. Korten, S. Leoni, L. Lewandowski, S. Lunardi, R. Menegazzo, D. Mengoni, C. Michelagnoli, T. Mijatović, G. Montagnoli, D. Montanari, D. Napoli, Zs. Podolyák, G. Pollarolo, F. Recchia, D. Rosiak, N. Saed-Samii, E. Şahin, F. Scarlassara, M. Seidlitz, P.-A. Söderström, A. M. Stefanini, O. Stezowski, S. Szilner, B. Szpak, C. Ur, J. J. Valiente-Dobón, M. Weinert, K. Wolf, and K. O. Zell.  
Phys. Rev. C 98, (2018) 054312.

*42) "Low-lying dipole response in the unstable  $^{70}\text{Ni}$  nucleus"*

O. Wieland, A. Bracco, F. Camera, R. Avigo, H. Baba, N. Nakatsuka, T. Aumann, S. R. Banerjee, G. Benzoni, K. Boretzky, C. Caesar, S. Ceruti, S. Chen, F. C. L. Crespi, V. Derya, P. Doornenbal, N. Fukuda, A. Giaz, K. Ieki, N. Kobayashi, Y. Kondo, S. Koyama, T. Kubo, M. Matsushita, B. Million, T. Motobayashi, T. Nakamura, M. Nishimura, H. Otsu, T. Ozaki, A. T. Saito, H. Sakurai, H. Scheit, F. Schindler, P. Schrock, Y. Shiga, M. Shikata, S. Shimoura, D. Steppenbeck, T. Sumikama, S. Takeuchi, R. Taniuchi, Y. Togano, J. Tscheuschner, J. Tsubota, H. Wang, K. Wimmer, and K. Yoneda.  
Phys. Rev. C 98, (2018) 064313.

*43) "Identification of high-spin proton configurations in  $^{136}\text{Ba}$  and  $^{137}\text{Ba}$ "*

L. Kaya, A. Vogt, P. Reiter, C. Müller-Gatermann, A. Gargano, L. Coraggio, N. Itaco, A. Blazhev, K. Arnschwald, D. Bazzacco, B. Birkenbach, A. Bracco, B. Bruyneel, L. Corradi, F. C. L. Crespi, G. de Angelis, M. Droste, J. Eberth, E. Farnea, E. Fioretto, C. Fransen, A. Gadea, A. Giaz, A. Görgen, A. Gottardo, K. Hadyńska-Klęk, H. Hess, R. Hetzenegger, R. Hirsch, P. R. John, J. Jolie, A. Jungclaus, W. Korten, S. Leoni, L. Lewandowski, S. Lunardi, R. Menegazzo, D. Mengoni, C. Michelagnoli, T. Mijatović, G. Montagnoli, D. Montanari, D. Napoli, Zs. Podolyák, G. Pollarolo, F. Recchia, D. Rosiak, N. Saed-Samii, E. Şahin, M. Siciliano, F. Scarlassara, M. Seidlitz, P.-A. Söderström, A. M. Stefanini, O. Stezowski, S. Szilner, B. Szpak, C. Ur, J. J. Valiente-Dobón, M. Weinert, K. Wolf, and K. O. Zell.  
Phys. Rev. C 99, (2019) 014301.

*44) "Study of the isospin symmetry in  $^{60}\text{Zn}^*$ "*

G. Gosta, S. Ceruti, A. Mentana, M. Ciemała, F. Camera, A. Bracco, G. Benzoni, N. Blasi, G. Bocchi, S. Brambilla, F.C.L. Crespi, A. Giaz, S. Leoni, B. Million, O. Wieland, M. Kmiecik, A. Maj, B. Wasilewska, M. Ziębliński, D. Filipescu, D. Ghita, V. Zamfir, J.J. Valiente-Dobon, G. de Angelis, F. Galtarossa, A. Goasduff, G. Jaworski, D.R. Napoli. Testov, M. Siciliano, T. Marchi, D. Mengoni. Bazzacco, A. Boso, P.R. John, F. Recchia, R. Raabe, O. Poleschchuk, J. Yan.  
Acta Physica Polonica B, 50, (2019) 481.

*45) "Distillation and stripping pilot plants for the JUNO neutrino detector: Design, operations and reliability"*

P.Lombardi, M.Montuschi, A.Formozov, A.Brigatti, S.Parmeggiano, R.Pompilio, W.Depnering, S.Franke, R.Gaigher, J.Joutsenvaara, A.Mengucci, E.Meroni, H.Steiger, F.Mantovani, G.Ranucci, G.Andronico, V.Antonelli, M.Baldoncini, M.Bellato, E.Bernier, R.Brugnera, A.Budano, M.Buscemi, S.Bussino, R.Caruso, D.Chiesa, C.Clementi, D.Corti, F.Dal Corso, X.F.Ding, S.Dusini, A.Fabbri, G.Fiorentini, R.Ford, G.Galet, A.Garfagnini, M.Giammarchi, A.Giaz, M.Grassi, A.Insolia, R.Isocrate, I.Lippi, Y.Malyshki, S.M.Mari, F.Marini, C.Martellini, A.Martini, M.Mezzetto, L.Miramonti, S.Monforte, P.Montini, M.Nastasi, F.Ortica, A.Paoloni, D.Pedretti, N.Pelliccia, E.Previtali, A.C.Re, B.Ricci, D.Riondino, A.Romani, P.Saggese, G.Salamanna, F.H.Sawy, G.Settanta, M.Sistii, C.Sirignano, L.Stanco, V.Strati, G.Verde, L.Votano.  
Nuclear instruments & methods in physics research. SECTION A, 925, (2019), 6.

*46) "GIGJ: A Crustal Gravity Model of the Guangdong Province for Predicting the Geoneutrino Signal at the JUNO Experiment"*

M. Reguzzoni, L. Rossi, M. Baldoncini, I. Callegari, P. Poli, D. Sampietro, V. Strati, F. Mantovani, G. Andronico, V. Antonelli, M. Bellato, E. Bernieri, A. Brigatti, R. Brugnera, A. Budano, M. Buscemi, S. Bussino, R. Caruso, D. Chiesa, D. Corti, F. Dal Corso, X.F. Ding, S. Dusini, A. Fabbri, G. Fiorentini, R. Ford, A. Formozov, G. Galet, A. Garfagnini, M. Giammarchi, A. Giaz, M. Grassi, A. Insolia, R. Isocrate, I. Lippi, F. Longhitano, D. Lo Presti, P. Lombardi, Y. Malyshkin, F. Marini, S.M. Mari, C. Martellini, E. Meroni, M. Mezzetto, L. Miramonti, S. Monforte, M. Montuschi, M. Nastasi, F. Ortica, A. Paoloni, S. Parmeggiano, D. Pedretti, N. Pelliccia, R. Pompilio,

E. Previtali, G. Ranucci, A.C. Re, B. Ricci, A. Romani, P. Saggese, G. Salamanna, F.H. Sawy, G. Settanta, M. Sisti, C. Sirignano, M. Spinetti, L. Stanco, G. Verde, L. Votano.  
Journal of Geophysical Research: Solid Earth, 124(4), pp. 4231-4249.

*47) "Isomer spectroscopy in  $^{133}\text{Ba}$  and high-spin structure of  $^{134}\text{Ba}$ "*

L. Kaya, A. Vogt, P. Reiter, M. Siciliano, N. Shimizu, Y. Utsuno, H.-K. Wang, A. Gargano, L. Coraggio, N. Itaco, K. Arnsward, D. Bazzacco, B. Birkenbach, A. Blazhev, A. Bracco, B. Bruyneel, L. Corradi, F. C. L. Crespi, G. de Angelis, M. Droste, J. Eberth, A. Esmaylzadeh, E. Farnea, E. Fioretto, C. Fransen, A. Gadea, A. Giaz, A. Görgen, A. Gottardo, K. Hadyńska-Klęk, H. Hess, R. Hirsch, P. R. John, J. Jolie, A. Jungclaus, V. Karayonchev, L. Kornwebel, W. Korten, S. Leoni, L. Lewandowski, S. Lunardi, R. Menegazzo, D. Mengoni, C. Michelagnoli, T. Mijatović, G. Montagnoli, D. Montanari, C. Müller-Gatermann, D. Napoli, Zs. Podolyák, G. Pollarolo, F. Recchia, J.-M. Régis, N. Saed-Samii, E. Şahin, F. Scarlassara, K. Schomacker, M. Seidlitz, B. Siebeck, P.-A. Söderström, A. M. Stefanini, O. Stezowski, S. Szilner, B. Szpak, E. Teruya, C. Ur, J. J. Valiente-Dobón, K. Wolf, K. Yanase, N. Yoshinaga, and K. O. Zell.  
Physical Review C, 100(2), 024323.

*48) "Nanoseconds Timing System Based on IEEE 1588 FPGA Implementation"*

D. Pedretti, M. Bellato, R. Isocrate, A. Bergnoli, R. Brugnera, D. Corti, F. Dal Corso, G. Galet, A. Garfagnini, A. Giaz, I. Lippi, F. Marini, G. Andronico, V. Antonelli, M. Baldoncini, E. Bernieri, A. Brigatti, A. Budano, M. Buscemi, S. Bussino, R. Caruso, D. Chiesa, C. Clementi, X.F. Ding, S. Dusini, A. Fabbri, R. Ford, A. Formozov, M. Giammarchi, M. Grassi, A. Insolita, P. Lombardi, F. Mantovani, S.M. Mari, C. Martellini, A. Martini, E. Meroni, L. Miramonti, S. Monforte, P. Montini, M. Montuschi, N. Nastasi, F. Ortica, A. Paoloni, E. Previtali, G. Ranucci, A.C. Re, B. Ricci, A. Romani, G. Salamanna, F.H. Sawy, G. Settanta, M. Sisti, C. Sirignano, L. Stanco, V. Strati, G. Verde.  
IEEE Transactions on Nuclear Science, 66(7), 8669820, pp. 1151-1158.

*49) "Fragmentation of Single-Particle Strength around the Doubly Magic Nucleus Sn 132 and the Position of the  $0f_{5/2}$  Proton-Hole State in In 131"*

V. Vaquero, A. Jungclaus, T. Aumann, J. Tscheuschner, E. V. Litvinova, J. A. Tostevin, H. Baba, D. S. Ahn, R. Avigo, K. Boretzky, A. Bracco, C. Caesar, F. Camera, S. Chen, V. Derya, P. Doornenbal, J. Endres, N. Fukuda, U. Garg, A. Giaz, M. N. Harakeh, M. Heil, A. Horvat, K. Ieki, N. Imai, N. Inabe, N. Kalantar-Nayestanaki, N. Kobayashi, Y. Kondo, S. Koyama, T. Kubo, I. Martel, M. Matsushita, B. Million, T. Motobayashi, T. Nakamura, N. Nakatsuka, M. Nishimura, S. Nishimura, S. Ota, H. Otsu, T. Ozaki, M. Petri, R. Reifarth, J. L. Rodríguez-Sánchez, D. Rossi, A. T. Saito, H. Sakurai, D. Savran, H. Scheit, F. Schindler, P. Schrock, D. Semmler, Y. Shiga, M. Shikata, Y. Shimizu, H. Simon, D. Steppenbeck, H. Suzuki, T. Sumikama, D. Symochko, I. Syndikus, H. Takeda, S. Takeuchi, R. Taniuchi, Y. Togano, J. Tsubota, H. Wang, O. Wieland, K. Yoneda, J. Zenihiro, and A. Zilges.  
Phys. Rev. Lett. 124, (2020) 022501.

**MOST RELEVANT CONFERENCE PROCEEDING:**

In this section the most relevant conference proceedings are reported. The proceedings with peer review are reported and the proceedings with and associated DOI.

*1) "A 16 Channel NIM Module for a complete processing of fast scintillator signals"*

C. Boiano, R. Bassini, F. Camera, B. Million, O. Wieland, A. Giaz  
IEEE Nuclear Science Symposium Conference Record, 2008. NSS'08, (2008), 2068 – 2070, DOI: 10.1109/NSSMIC.2008.4774893.

*2) "Pulse Shape results of  $\text{LaBr}_3$  and  $\text{BaF}_2$  scintillator obtained with a 16 ch. fast analog stretcher module"*

C. Boiano, F. Camera, S. Brambilla, F. Crespi, S. Frega, S. Riboldi, A. Giaz  
IEEE Nuclear Science Symposium Conference Record, 2010. NSS'10, (2010), 268 – 270, DOI: 10.1109/NSSMIC.2010.5873761.



3) *"Analysis and First Order Correction of Signal Saturation Effects in Photomultiplier Tubes for Improved Estimation of Interacting Radiation Energy in Lanthanum Bromide Scintillators"*

Nives Blasi, Sergio Brambilla, Ciro Boiano, Franco Camera, A. Camplani, Fabio C.L. Crespi, Agnese Giaz, Benedicte Million, Roberto Nicolini, Luna Pellegri, Stefano Riboldi, Oliver Wieland  
IEEE Nuclear Science Symposium Conference Record, 2010. NSS'10, (2010), 1809 –1812, DOI: 10.1109/NSSMIC.2010.5874087.

4) *"Active Voltage Divider for Improved Estimation of Interacting Radiation Energy with Photomultiplier Tubes Coupled to High Light Yield Scintillators"*

Stefano Riboldi, Franco Camera, Nives Blasi, Sergio Brambilla, Ciro Boiano, Fabio C.L. Crespi, Agnese Giaz, Benedicte Million, Roberto Nicolini, Luna Pellegri, Oliver Wieland  
IEEE Nuclear Science Symposium Conference Record, 2011. NSS'11, (2011), 776 – 778, DOI: 10.1109/NSSMIC.2011.6154296.

5) *"Response of AGATA Segmented HPGe Detectors to Gamma-Rays up to 15.1 MeV"*

F.C.L. Crespi, R. Avigo, F. Camera, G. Benzoni, N. Blasi, S. Bottoni, A. Bracco, S. Brambilla, P. Casati, F. Coniglio, A. Corsi, A. Giaz, S. Leoni, B. Million, R. Nicolini, L. Pellegri, S. Riboldi, V. Vandone, O. Wieland, S. Akkoyun, A. Atac, D. Bazzacco, M. Bellato, D. Bortolato, E. Calore, M. Ciemala, E. Farnea, A. Gadea, A. Gottardo, M. Kmiecik, A. Maj, D. Mengoni, C. Michelagnoli, D. Montanari, D.R. Napoli, J. Nyberg, F. Recchia, E. Sahin, P.-A. Soderstrom, C. Ur, J. J. Valiente Dobon and The AGATA Collaboration  
IEEE Nuclear Science Symposium Conference Record, 2011. NSS'11, (2011), 1147 – 1149, DOI: 10.1109/NSSMIC.2011.6154591.

6) *"Properties of a very large volume LaBr<sub>3</sub>:Ce detector"*

A. Giaz, L. Pellegri, S. Riboldi, F. Camera, N. Blasi, C. Boiano, S. Brambilla, S. Ceruti, F. C. L. Crespi, M. Csatlós, J. Gulyás, A. Krasznahorkay, S. Lodetti, B. Million, L. Stuhl, and O. Wieland.  
IEEE Nuclear Science Symposium Conference Record, 2012. NSS'12, (2012), 331 –334, DOI: 10.1109/NSSMIC.2012.6551119.

7) *"Position sensitivity in a 3" × 3" LaBr<sub>3</sub>:Ce scintillator"*

A. Giaz, F. Camera, N. Blasi, C. Boiano, S. Brambilla, S. Coelli, B. Million, S. Riboldi, O. Wieland.  
IEEE Nuclear Science Symposium Conference Record, 2013. NSS'13, (2013), 1 – 3, DOI: 10.1109/NSSMIC.2013.6829642.

8) *"3" × 3" LaBr<sub>3</sub>:Ce detector response to monochromatic protons"*

A. Giaz, S. Brambilla, B. Szpak, M. Zieblinski, N. Blasi, C. Boiano, F. Camera, S. Ceruti, B. Million, S. Riboldi, O. Wieland, P. Bednarczyk, M. Ciemala, B. Fornal, M. Jastrzab, M. Kmiecik, M. Krzysiek, A. Maj, W. Meczynski, P. Napiorkowski.  
IEEE Nuclear Science Symposium Conference Record, 2013. NSS'13, (2013), 1 – 4, DOI: 10.1109/NSSMIC.2013.6829648.

9) *"Investigation of imaging and spectroscopy performances of a 1"×1" LaBr<sub>3</sub>:Ce scintillator readout by Silicon Drift Detectors for nuclear physics measurements"*

P. Busca, A.D. Butt, C. Fiorini, A. Marone, M. Occhipinti, R. Peloso, R. Quaglia, F. Camera, A. Giaz, B. Million, G. Giacomini, C. Piemonte.  
IEEE Nuclear Science Symposium Conference Record, 2013. NSS'13, (2013), 1 – 4, DOI: 10.1109/NSSMIC.2013.6829807.

10) *"Performances of a 1"×1" Cs<sub>2</sub>LiYCl<sub>6</sub> scintillator detector"*

L. Pellegri, E. Bizzarri, N. Blasi, F. Camera, A. Giaz, R. Avigo, C. Boiano, S. Brambilla, S. Ceruti, B. Million, S. Riboldi, O. Wieland.  
IEEE Nuclear Science Symposium Conference Record, 2013. NSS'13, (2013), 1 – 3, DOI: 10.1109/NSSMIC.2013.6829614.

**11) "Prompt high energy dipole gamma emission"**

A. Corsi, A. Giaz, A. Bracco, F. Camera, F.C.L. Crespi, S. Leoni, R. Nicolini, V. Vandone, O. Wieland, G. Benzoni, N. Blasi, S. Brambilla, B. Million, S. Barlini, L. Bardelli, M. Bini, G. Casini, A. Nannini, G. Pasquali, G. Poggi, S. Carboni, V.L. Kravchuk, M. Cinausero, M. Degerlier, F. Gramegna, T. Marchi, D. Montanari, G. Baiocco, M. Bruno, M. D'Agostino, L. Morelli, S. Sambì, G. Vannini, M. Ciemala, M. Kmiecik, A. Maj, K. Mazurek, W. Meczynski, S. Myalski, D. Santonocito, A. Rosa, C. Maiolino, M. Colonna, M. Di Toro, C. Rizzo  
Acta physica Polonica. B. - 42:3/4(2011), pp. 619-628.

**12) "Study of high-lying states in  $^{208}\text{Pb}$  with the AGATA demonstrator"**

R. Nicolini, A. Bracco, D. Mengoni, S. Leoni, F. Camera, D. Bazzacco, E. Farnea, A. Gadea, F. Birocchi, A. Camplani, A. Corsi, F.C.L. Crespi, A. Giaz, L. Pellegrini, S. Riboldi, V. Vandone, G. Benzoni, N. Blasi, C. Boiano, S. Brambilla, B. Million, O. Wieland, M. Bellato, A. Gottardo, R. Isocrate, C. Michelagnoli, D. Montanari, F. Recchia, C. Ur, D. Bortolato, E. Calore, P. Molini, D.R. Napoli, E. Sahin, J.J. Valiente-Dobon, M. Ciemala, M. Kmiecik, A. Maj, S. Myalski, A. Bürger, R. Kempley, P. Reiter  
Acta physica Polonica. B. - 42:3/4(2011), pp. 653-657.

**13) "Refinement of the  $^{42}\text{Ca}$  level scheme. Preliminary results from the first AGATA demonstrator experiment"**

K. Hadynska-Klek, P.J. Napiorkowski, A. Maj, F. Azaiez, J.J. Valiente-Dobón, G. de Angelis, G. Anil Kumar, D. Bazzacco, P. Bednarczyk, M. Bellato, G. Benzoni, L. Berti, D. Bortolato, B. Bruyneel, F. Camera, M. Ciemala, P. Cocconi, A. Colombo, A. Corsi, F. Crespi, A. Czermak, B. Dulny, E. Farnea, B. Fornal, S. Franchoo, A. Gadea, A. Giaz, A. Gottardo, X. Grave, J. Grebosz, M. Gulmini, H. Hess, R. Isocrate, G. Jaworski, M. Kicińska-Habior, M. Kmiecik, N. Kondratyev, A. Korichi, W. Korten, G. Lehaut, S. Lenzi, S. Leoni, S. Lunardi, G. Maron, R. Menegazzo, D. Mengoni, E. Merchán, W. Meczynski, C. Michelagnoli, P. Molini, D.R. Napoli, R. Nicolini, M. Niikura, M. Palacz, G. Rampazzo, F. Recchia, N. Redon, P. Reiter, D. Rosso, E. Sahin, J. Srebrny, I. Stefan, O. Stézowski, J. Styczen, N. Toniolo, C.A. Ur, V. Vandone, B. Wadsworth, A. Wiens, K. Wrzosek-Lipska, M. Zielinska, M. Zieblinski  
Acta physica Polonica. B. - 42:3/4(2011), pp. 817-824.

**14) "Search for Jacobi Shape Transition in Hot Rotating  $^{88}\text{Mo}$  Nuclei Through Giant Dipole Resonance Decay"**

M. Ciemala, M. Kmiecik, V.L. Kravchuk, A. Maj, S. Barlini, G. Casini, F. Gramegna, F. Camera, A. Corsi, L. Bardelli, P. Bednarczyk, B. Fornal, M. Matejska-Minda, K. Mazurek, W. Męczyński, S. Myalski, J. Styczeń, B. Szpak, M. Ziębliński, M. Cinausero, T. Marchi, V. Rizzi, G. Prete, M. Degerlier, G. Benzoni, N. Blasi, A. Bracco, S. Brambilla, F. Crespi, S. Leoni, B. Million, O. Wieland, D. Montanari, R. Nicolini, A. Giaz, V. Vandone, G. Baiocco, M. Bruno, M. D'Agostino, L. Morelli, G. Vannini, M. Chiari, A. Nannini, S. Piantelli, A. Chbihi, J.P. Wieleczko, I. Mazumdar, O. Roberts, J. Dudek  
Acta physica Polonica. B. - 42:3/4(2011), pp. 633-637

**15) "Towards the Determination of Superdeformation in  $^{42}\text{Ca}$ "**

K. Hadynska-Klek, P.J. Napiorkowski, A. Maj, F. Azaiez, M. Kicińska-Habior, J.J. Valiente-Dobón, G. de Angelis, T. Abraham, G. Anil Kumar, B.-Q. Arnés, D. Bazzacco, M. Bellato, D. Bortolato, P. Bednarczyk, G. Benzoni, L. Berti, B. Birkenbach, B. Bruyneel, S. Brambilla, F. Camera, J. Chavas, M. Ciemala, P. Cocconi, P. Coleman-Smith, A. Colombo, A. Corsi, F.C.L. Crespi, D.M. Cullen, A. Czermak, P. Désesquelles, B. Dulny, J. Eberth, E. Farnea, B. Fornal, S. Franchoo, A. Gadea, A. Giaz, A. Gottardo, X. Grave, J. Grębosz, M. Gulmini, T. Habermann, R. Isocrate, J. Iwanicki, G. Jaworski, A. Jungclaus, N. Karkour, M. Kmiecik, D. Karpiński, M. Kisieliński, N. Kondratyev, A. Korichi, M. Komorowska, M. Kowalczyk, W. Korten, M. Krzysiek, G. Lehaut, S. Leoni, A. Lopez-Martens, S. Lunardi, G. Maron, K. Mazurek, R. Menegazzo, D. Mengoni, E. Merchán, W. Męczyński, C. Michelagnoli, J. Mierzejewski, B. Million, P. Molini, S. Myalski, D.R. Napoli, R. Nicolini, M. Niikura, A. Obertelli, S.F. Özmen, M. Palacz, A. Pullia, G. Rampazzo, F. Recchia, N. Redon, P. Reiter, D. Rosso, K. Rusek, E. Sahin, M.-D. Salsac, P.-A. Söderström, J. Srebrny, I. Stefan, O. Stézowski, J. Styczeń, Ch. Theisen, N. Toniolo, C.A. Ur, V. Vandone, R. Wadsworth, B. Wasilewska, A. Wiens, K. Wrzosek-Lipska, M. Zielińska, M. Ziębliński.  
Acta Physica Polonica B, vol. 44, issue 3, (2013) p. 617

**16) "Characterization of new scintillators:  $\text{SrI}_2\text{:Eu}$ ,  $\text{CeBr}_3$ ,  $\text{GYGAG:Ce}$  and  $\text{CLYC:Ce}$ "**

A. Giaz, V. Fossati, G. Hull, F. Camera, N. Blasi, S. Brambilla, S. Ceruti, N. Cherepy, B. Million, L. Pellegrini and S

Riboldi.

Journal of Physics: Conference Series, Volume 620, conference 1

*17) "Position sensitivity in 3"×3" Spectroscopic LaBr<sub>3</sub>:Ce Crystals"*

N Blasi, A Giaz, C Boiano, S Brambilla, F Camera, B Million and S Riboldi.

Journal of Physics: Conference Series, Volume 620, conference 1

*18) "The PARIS cluster coupled to the BaFPro electronic module: data analysis from the NRF experiment at the  $\gamma$ ELBE facility"*

B Wasilewska, P Bednarczyk, C Boiano, S Brambilla, F Camera, M Ciemała, O Dorvaux, A Giaz, M Jastrzab, S Kihel, M Kmiecik, A Maj, I Matea, R Massarczyk, I Mazumdar, A Mentana, P Napiorkowski, B Sowicki, R Schwengner, S Riboldi, M Ziebliński and the PARIS collaboration.

Journal of Physics: Conference Series, Volume 620, conference 1

*19) "Phototube non-linearity correction technique"*

S Riboldi, N Blasi, S Brambilla, F Camera, A Giaz and B Million.

Journal of Physics: Conference Series, Volume 620, conference 1

*20) "Gamma decay of the possible 1-two-phonon state in  $^{140}\text{Ce}$  excited via inelastic scattering of  $^{17}\text{O}$ "*

M. Krzysiek, M. Kmiecik, A. Maj, P. Bednarczyk, A. Bracco, F.C.L. Crespi, E.G. Lanza, R. Avigo, D. Bazzacco, G. Benzoni, B. Birkenbach, N. Blasi, S. Bottoni, F. Camera, S. Ceruti, M. Ciemała, G. De Angelis, E. Farnea, A. Gadea, A. Giaz, A. Görgen, A. Gottardo, J. Grębosz, R. Isocrate, S. Leoni, S. Lunardi, K. Mazurek, D. Mengoni, C. Michelagnoli, B. Million, A.I. Morales, D.R. Napoli, R. Nicolini, L. Pellegri, F. Recchia, B. Siebeck, S. Siem, C. Ur, J.J. Valiente-Dobon, O. Wieland, M. Ziębliński.

Acta Physica Polonica B 47 (2016) 859-866.

*21) "Study of the soft dipole modes in  $^{140}\text{Ce}$  via inelastic scattering of  $^{17}\text{O}$ "*

M Krzysiek, M Kmiecik, A Maj, P Bednarczyk, M Ciemała, B Fornal, J Grębosz, K Mazurek, W Męczyński, M Ziębliński, F C L Crespi, A Bracco, G Benzoni, N Blasi, C Boiano, S Bottoni, S Brambilla, F Camera, A Giaz, S Leoni, B Million, A I Morales, R Nicolini, L Pellegri, S Riboldi, V Vandone, O Wieland, G De Angelis, D R Napoli, J J Valiente-Dobon, D Bazzacco, E Farnea, A Gottardo, S Lenzi, S Lunardi, D Mengoni, C Michelagnoli, F Recchia, C Ur, A Gadea, T Huyuk, D Barrientos, B Birkenbach, K Geibel, H Hess, P Reiter, T Steinbach, A Wiens, A Bürger, A Görgen, M Guttormsen, A C Larsen and S Siem.

Physica Scripta, 89 (2014) 054016

*22) "Measurement of fast neutron detection efficiency with  $^6\text{Li}$  and  $^7\text{Li}$  enriched CLYC scintillators."*

A. Mentana, F. Camera, A. Giaz, N. Blasi, S. Brambilla, S. Ceruti, L. Gini, F. Groppi, S. Manenti, B. Million, S. Riboldi.

Journal of physics. Conference series, 763, (2016),1.

*23) "'3 × 3" LaBr<sub>3</sub>:Ce position sensitivity with multi-anode PMT readout."*

A. Giaz, N. Blasi, F. Camera, C. Boiano, S. Brambilla, B. Million, S. Riboldi.

IEEE Nuclear Science Symposium Conference Record, 2014. NSS'14, (2016), 1 – 5, DOI: 10.1109/NSSMIC.2014.7431199.

*24) "Measurement of  $\beta$  - decay continuum spectrum of  $^{138}\text{La}$ "*

A. Giaz, G. Gosta, F. Camera, S. Riboldi, N. Blasi, A. Bracco, S. Brambilla, B. Million.

IEEE Nuclear Science Symposium Conference Record, 2014. NSS'14, (2016), 1 – 4, DOI: 10.1109/NSSMIC.2014.7431201.

*25) "Thermal and fast neutron detection with two CLYC scintillators"*

L. Pellegri, A. Giaz, F. Camera, N. Blasi, S. Brambilla, S. Ceruti, B. Million, S. Riboldi, C. Cazzaniga, M. Nocente, G. Gorini, M. Tardocchi, M. Rebai, A. Pietropaolo, M. Pillon.

IEEE Nuclear Science Symposium Conference Record, 2014. NSS'14, (2016), 1 – 3, DOI:

10.1109/NSSMIC.2014.7431190.

*26) "Constraining hot sources in central heavy-ion collisions below 20 MeV/u"*

S. Valdre, S. Piantelli, G. Casini, S. Barlini, M. Ciemala, M. Kmiecik, A. Maj, K. Mazurek, M. Cinausero, F. Gramegna, V.L. Kravchuk, L. Morelli, T. [Marchi](#), S. Appannababu, G. Baiocco, P. Bednarczyk, G. Benzoni, M. Bini, N. Blasi, A. Bracco, S. Brambilla, M. Bruno, F. Camera, M. Cicerchia, M. Colonna, F.C.L. Crespi, M. D'Agostino, M. Degerlier, D. Fabris, B. Fornal, O.V. Fotina, [A. Giaz](#), M. Krzysiek, S. Leoni, J. Mabilia, M. Matejska-Minda, W. Meczynski, B. Million, D. Montanari, S. Myalski, R. Nicolini, A. Olmi, G. Pasquali, G. Prete, J. Styczen, B. Szpak, E. Vardaci, B. Wasilewska, O. Wieland, M. Zieblinski.  
Acta Physica Polonica B, 48 (2017), 635.

*27) "The first results from studies of gamma decay of proton-induced excitations at the CCB facility"*

B. Wasilewska, M. Kmiecik, A. Maj, J. Łukasik, P. Pawłowski, M. Ciemala, M. Zieblinski, P. Lasko, J. grebosz, F.C.L. Crespi, A. Bracco, S. Brambilla, [A. Giaz](#), I. Ciepał, B. Fornal, K. Guguła, L. Iskra, M. Krzysiek, M. Matejska-Minda, K. mazurek.  
Acta Physica Polonica B . 2017, 48 (2017), 415.

*28) "The Global Control Unit for the JUNO Front-End Electronics"*

D. Pedretti, M. Bellato, A. Bergnoli, R. Brugnera, D. Corti, F. Dal Corso, A. Garfagnini, [A. Giaz](#), J. Hu, R. Isocrate, I. Lippi, On Behalf of the JUNO Collaboration.  
Springer Proceedings in Physics SPPHY, 212 (2018), 186.

*29) "Status and perspectives of juno experiment"*

[A. Giaz](#), On Behalf of the JUNO Collaboration.  
Springer Proceedings in Physics SPPHY, 212 (2018), 186.

## TALKS AT INTERNATIONAL CONFERENCES AND WORKSHOPS

---

**20 Talks at international conferences four of which are invited talks.**

**1) Invited Talk:** Isospin Mixing in the N=Z Nucleus  $^{80}\text{Zr}$  at Medium Temperature

EGAN workshop 2012

25/06-27/06 2012, Orsay, Paris, France

**2) Invited Talk:** Characterization of new scintillators: CLYC, GYGAG,  $\text{SrI}_2$  and  $\text{CeBr}_3$

EGAN workshop 2014

23/06-26/06 2014, GSI, Germany

**3) Invited Talk:** New scintillator detectors for nuclear physics experiments

Workshop on nuclear spectroscopy instrumentation network and AGATA physics workshop (NUSPIN 2016)

27/06-01/07/2016 Venezia, Italy

**4) Invited Talk:** Status and perspectives of the JUNO experiment

NuPhys2017: Prospects in Neutrino Physics

20-22/12/2017, London, UK

**5) Talk:** Measurements of Dynamical Dipole in N/Z asymmetric reactions with Garfield at LNL

SPES 2010 Workshop & IV LEA-COLLIGA Meeting

15/11-19/11 2010, Legnaro, Italy

**6) Talk:** Measurement of Dynamical dipole in isospin asymmetric reactions

XIX International school on nuclear physics, neutron physics and applications – 2011

19-15/09 2011 Varna, Bulgaria

**7) Talk:** Dynamical Dipole and EOS in N/Z asymmetric fusion reactions with stable and unstable beams  
Eurorib '12 - European Radioactive Ion Beam Conference 2012

20/05-25/05 2012, Abano Terme, Italy

**8) Talk:** Misura dello spettro  $\beta^-$  del  $^{138}\text{La}$

100° Congresso Nazionale – Società Italiana di Fisica

22-26/09/2014 Pisa, Italy

**9) Talk:** Caratterizzazione di scintillatori CLYC

100° Congresso Nazionale – Società Italiana di Fisica

22-26/09/2014 Pisa, Italy

**10) Talk:** Characterization of new scintillators: GYGAG, SrI2, CeBr3 and CLYC

Applications of Novel Scintillators for Research and Industry (ANSRI 2015)

12-14/01/2015 Dublino, Ireland

**11) Talk:** Thermal and Fast Neutron Detection with two CLYC Scintillators

14th International Conference on nuclear reaction mechanism

15-19/06/2015 Varenna (LC), Italy

**12) Talk:** Fast Neutron measurements with  $^7\text{Li}$  and  $^6\text{Li}$  enriched CLYC scintillators

Nuclear Science Symposium, Medical Imaging Conference 2015

31/10-07/11 2015 San Diego CA, USA

**13) Talk:** Investigation of fast neutron spectroscopy capability of  $^7\text{Li}$  and  $^6\text{Li}$  enriched CLYC scintillator for nuclear physics experiments

Applications of Novel Scintillators for Research and Industry (ANSRI 2016)

11-13/05/2016 Dublino, Ireland

**14) Talk:** Mixed Analog-Digital Processing for Energy, Time and Pulse Shape Analysis with CLYC Scintillator Signals

Applications of Novel Scintillators for Research and Industry (ANSRI 2016)

11-13/05/2016 Dublino, Ireland

**15) Talk:** Studio della possibilità di misurare spetti continui di neutroni veloci con scintillatori CLYC

102° Congresso Nazionale – Società Italiana di Fisica

26-30/09/2016 Padova, Italy

**16) Talk:** New Scintillator detectors for nuclear physics experiments

Terzo Incontro Nazionale di Fisica Nucleare - INFN 2016

14-16/11/2016 Laboratori Nazionali di Frascati, Italy

**17) Talk:** A new scintillator detector for nuclear physics experiments: the CLYC scintillator

GDS topical meeting: GDS coupling to auxiliary detection systems

25-27/01/2017 Laboratori Nazionali di Legnaro, Italy

**18) Talk:** Investigation of internal background of  $^7\text{Li}$  and  $^6\text{Li}$  enriched CLYC scintillators

Workshop on nuclear spectroscopy instrumentation network and AGATA physics workshop (NUSPIN 2017)

26-29/06/2017, GSI, Germany

**19) Talk:** Status and perspectives of JUNO experiment

EPS conference on high energy physics

05-12/07/2017, Venice, Italy

**20) Talk:** Status e prospettive future dell'elettronica dei fotomoltiplicatori di grandi dimensione dell'esperimento JUNO

XVII edizione degli incontri di fisica delle alte energie

04-06/04/2018, Milano Bicocca, Italy

## POSTER PRESENTATIONS AT INTERNATIONAL CONFERENCES AND WORKSHOPS

---

**1) Poster:** Properties of a very large volume LaBr<sub>3</sub>:Ce detector

Nuclear Science Symposium, Medical Imaging Conference 2012

28/10-02/11 2012, Anaheim, California, USA

**2) Poster:** Dynamical Dipole And Equation Of State In N/Z Asymmetric Fusion Reactions

INPC 2013

02-07/06/2013 Firenze, Italy

**3) Poster:** 3"x 3" LaBr<sub>3</sub>:Ce detector response to monochromatic protons

Nuclear Science Symposium, Medical Imaging Conference 2013

27/10/2013 - 1/11/2013, Seoul, South Korea

**4) Poster:** Position sensitivity in a 3" x 3" LaBr<sub>3</sub>:Ce scintillator

Nuclear Science Symposium, Medical Imaging Conference 2013

27/10/2013 - 1/11/2013, Seoul, South Korea

**5) Poster:** 3"x3" LaBr<sub>3</sub>:Ce detector response to monochromatic protons

Zakopane conference on nuclear physics

31/08/2014 - 07/09/2014, Zakopane, Poland

**6) Poster:** Measurement of beta-decay continuum spectrum of <sup>138</sup>La

Nuclear Science Symposium, Medical Imaging Conference 2014

8-15/11/2014, Seattle, Washington, USA

**7) Poster:** Performances of new scintillator detectors: SrI<sub>2</sub>:Eu, CeBr<sub>3</sub>, GYGAG:Ce

Nuclear Science Symposium, Medical Imaging Conference 2014

8-15/11/2014, Seattle, Washington, USA

**8) Poster:** 3"x 3" LaBr<sub>3</sub>:Ce position sensitivity with multi-anode PMT readout

Nuclear Science Symposium, Medical Imaging Conference 2014

8-15/11/2014, Seattle, Washington, USA

Data

18/05/2020

Luogo

Renate

