

Program of the NUSPIN 2017 workshop

Monday 26th June

KBW, Main Lecture Hall

12:30 Lunch

13:30 Coffee

14:00-14:15 **Welcome**

Silvia Lenzi (University of Padova, Italy)

Session 1: chair: Silvia Lenzi

14:15-14:40 Paolo Giubellino (GSI/FAIR, Germany)

FAIR physics and perspectives for Nuclear Structure

14:40-15:05 Alahari Navin (GANIL, France)

Xperimenting Xploring Xperiencing Femtosience at GANIL

15:05-15:30 Diego Bettoni (Legnaro National Laboratories, Italy)

From Basic Research to Applications of Nuclear Technologies

15:30-15:55 Takaharu Otsuka (RIKEN/University of Tokyo, Japan)

Shell-model challenge to gamma-ray spectroscopy

15:55-16:20 Coffee

15:55 Workshop Photo

Session 2: chair: Araceli Lopez-Martens

16:20-16:45 Gabriel Martinez-Pinedo (TU Darmstadt, Germany)

Explosive nucleosynthesis of heavy elements: an astrophysical and nuclear physics challenge

16:45-17:10 Jonathan Wilson (IPN Orsay, France)

Physics at the ALTO facility

17:10-17:35 Adam Maj (IFJ, Krakow, Poland)

First PARIS experiments in the ENSAR2 TNA facilities

17:35-18:00 Gabriel Suliman (ELI-NP, Romania)

The segmented clover detector array (ELIADE) for NRF experiments at ELI-NP

- 18:00-18:15 Magdalena Matejska-Minda (HIL, University of Warsaw, Poland)
Electromagnetic properties of ^{45}Sc studied by low-energy Coulomb excitation
- 18:15-18:30 Ana Isabel Morales López (IFIC, Valencia, Spain)
Decay studies of exotic $A \sim 70$ nuclei: Test of nuclear properties at both extremes of the nuclear chart
- 18:30-18:45 Tugba Arici (GSI, Darmstadt, Germany)
Deformation around $A=70$ through the proton drip-line
- 18:45 Welcome Reception

Tuesday 27th June

KBW, Main Lecture Hall

Session 3: chair: Piotr Bednarczyk

- 9:00-9:25 Frederic Nowacki (IPHC, Strasbourg, France)
Shell Model Far From Stability: Islands of Inversion Mergers
- 9:25-9:50 Riccardo Raabe (KU Leuven, Belgium)
Novel experimental approaches to transfer reactions with RIBs
- 9:50-10:15 Fabio Crespi (University of Milano and INFN, Italy)
Gamma decay of pygmy states from inelastic scattering of ions
- 10:15-10:30 Dmitry Testov (DIFA and INFN Padova, Italy,)
E2 transition probabilities in light $^{110,112}\text{Te}$ isotopes
- 10:30-10:45 Marc Lettmann (TU Darmstadt, Germany)
Signatures of triaxiality in low-spin spectra of ^{86}Ge
- 10:45 – 11:05 Coffee

Session 4: chair: Jürgen Gerl

- 11:05-11:30 Christopher Campbell (LBNL, United States of America)
GRETINA: Status and Recent Results
- 11:30-11:55 Alejandro Algora (IFIC, Valencia, Spain)
DTAS: recent results and future plans
- 11:55-12:10 Claus Müller-Gattermann (IKP Cologne, Germany)
A New Dedicated Plunger Device for the GALILEO gamma-ray array
- 12:10-12:25 Agnese Giaz (INFN Milano, Italy)
Investigation of internal background of ^7Li and ^6Li enriched CLYC scintillators
- 12:25-12:40 Sefa Erturk (Omer Halisdemir University, Turkey)
Performance of NUMEXO2 Digital Electronic : Effect of K-parameter on the Energy Resolution
- 12:40-14:00 Lunch

Session 5: chair: Norbert Pietralla

- 14:00-14:25 Tomas Rodriguez (Universidad Autónoma de Madrid, Spain)
Recent applications of symmetry conserving configuration mixing methods to describe nuclear spectra
- 14:25-14:50 Liam Gaffney (CERN, Switzerland)
Exploiting post-accelerated RIBs with Miniball at HIE-ISOLDE
- 14:50-15:05 Christian Lorenz (Lund University, Sweden)
Quantum State Selective Decay Spectroscopy of ^{213}Ra
- 15:05-15:20 Volker Werner (TU Darmstadt, Germany)
The shape-transitional ^{98}Zr : Measurement of the 21^+ B(E2) value with GRETINA/CHICO2 at ATLAS/CARIBU
- 15:20-15:45 Angela Bracco (University of Milano and INFN, Italy)
The new Long Range Plan of NuPECC for Nuclear physics
- 15:45-16:00 Coffee
- 16:00 Transport to Darmstadt
- 17:00 – 18:00 Concert
- 19:00 - Dinner

Wednesday 28th June

KBW, Main Lecture Hall

Session 6: chair: Johan Nyberg

- 9:00-9:25 Luigi Corragio (INFN, Naples, Italy)
Realistic Shell Model for Exotic Nuclei: Reliability and Predictability
- 9:25-9:50 Caterina Michelagnoli (ILL, Grenoble, France)
FIPPS: the new Nuclear Physics instrument of ILL
- 9:50-10:05 Rudrajyoti Palit (TIFR, Mumbai, India)
Wobbling modes in odd-A nuclei in A~130 region
- 10:05-10:20 Sudipta Saha (TU Darmstadt and GSI, Darmstadt, Germany)
Observation of a long regular band structure at high spin in ⁸⁹Zr
- 10:20-10:35 Cesar Lizarazo (TU Darmstadt, Germany)
Isomer decay spectroscopy of neutron-rich ⁹²⁻⁹⁴Se
- 10:35-10:55 Coffee

Session 7: chair: Franco Camera

- 10:55-11:20 Jeremie Dudouet (IPNL, Lyon, France)
Exploring the low Z boundary of the island of deformation at N=60 using AGATA and VAMOS
- 11:20-11:45 Marcel Heine (IPHC/CNRS, Strasbourg, France)
Sub-barrier fusion cross section measurements with gamma-particle-coincidences with STELLA
- 11:45-12:10 Jean-Marc Régis (IKP, Köln, Germany)
New expertise on gamma-gamma fast timing using arrays of LaBr₃(Ce) detectors
- 12:10-12:25 Guangshun Li (GSI, Germany)
Simulation on the DESPEC Germanium Array Spectrometer (DEGAS)
- 12:25-12:40 Grześ Jaworski (LNL INFN, Italy)
The New Neutron Multiplicity Filter NEDA
- 12:40-14:00 Lunch
- 14:00-14:25 Paul Greenlees (University of Jyväskylä, Finland)
Nuclear Structure Studies at JYFL
- 14:25-14:50 Zsolt Podolyak (University of Surrey, United Kingdom)
The HISPEC/DESPEC project at FAIR

Working Groups meetings

Wednesday 28th June, KBW, Main Lecture Hall

Introduction: Daniele Mengoni (University of Padova and INFN, Italy)

WG1: **Perspective for the use of gamma-ray spectrometers**

Convener: Francesco Recchia (University of Padova and INFN, Italy)

14.50-15.10 Jonathan Wilson (IPN Orsay, France) (tbc)

On a distributed HPGe det lab (tbc)

15.10-15.30 Paul Greenlees (University of Jyväskylä, Finland)

JUROGAM III + MARA

15.30-15.50 Francesco Recchia (University of Padova and INFN, Italy)

A new setup for direct reaction w/ RIBs

15.50-16.10 Coffee break

WG2: **Data treatment for PSA, FEE, beam tracking devices**

Convener: Marlène Assie (IPN Orsay, France)

16.10-16.30 Gabriele Pasquali (University of Florence and INFN, Italy)

Radiation damage effects on the PSA performance

16.30-16.50 Ramon Aliaga (University of Valencia, Spain)

A Self-triggered, Deadtime-less FEE

16.50-17.10 Chiara Nociforo (GSI, Germany)

Pico-second resolution timing measurements

WG3: **High-efficiency and fast-timing scintillators**

Convener: Enrique Nacher (IEM-CSIC, Madrid, Spain)

17.10-17.30 Franco Camera (University of Milano and INFN, Italy)

Response of a large LaBr₃:Ce detector to 6-38 MeV gamma rays

17.30-17.50 Jose Manuel Udias (Univ. Complutense de Madrid, Spain)

Digital strategies for time and energy measurement for ultra-fast scintillators

17.50-18.10 Joakim Cederkal (University of Lund, Sweden)

Innovative solutions for the CALIFA forward endcap

18.10-18.15 Short Break

WG4: **Coupling a plunger device with a particle detector**

Convener: Alain Goasduff (University of Padova and INFN)

18.15-18.25 Joa Ljungvall (CSNSM Orsay, France)

title tbd

18.25-18.55 Asli Kusoglu (ELI – NP, Romania)

**High precision g-factor measurements with stable and radioactive nuclei
and perspectives for experiments @SPES and @ELI-NP**

Conclusive remarks (All)

Scientific Committee meeting

KBW 2.28

16:00

Program of the Annual AGATA Collaboration Meeting

Thursday 29th June

KBW, Main Lecture Hall

09:00 **Start of meeting**

chair: Johan Nyberg

09:00-09:30 Andres Gadea (IFIC Valencia, Spain)

AGATA status

09:30-09:55 Emmanuel Clement (GANIL, France)

AGATA campaign at GANIL

09:55-10:15 Paddy Regan (University of Surrey, UK)

AGATA + FATIMA sub-campaign at GANIL

10:15-10:35 Gilles de France (GANIL, France)

AGATA + DIAMANT + NEDA sub-campaign at GANIL

10:35-11:00 Coffee

chair: Jürgen Gerl

11:00-11:15 Philipp Napiralla (IKP TU Darmstadt, Germany)

Bayes-Tracking - A novel Approach to Gamma-ray Tracking

11:15-11:30 Hongjie Li (GANIL, France)

Improving Pulse Shape Analysis in a tracking array with reference pulses obtained from source data

AGATA Campaign at GSI 2012-2014

11:30-11:45 Natasa Lalovic (Lund University, Sweden)

Projectile fragmentation experiments in PreSPEC AGATA's S429: insight to exotic-nuclei production mechanisms via isomeric ratios

11:45-12:00 Oliver Wieland (INFN Milano, Italy)

Investigation of E1 Strength in ^{64,62}Fe

12:00-12:15 Alberto Boso (INFN Padova, Italy)

Isospin Mixing in the A=46, T=1 Isobaric Multiplet

12:15-12:30 Tayfun Hüyük (IFIC-CSIC Valencia, Spain)

Coulomb excitation of the band-terminating 12⁺ yrast trap in ⁵²Fe

12:30-14:00 Lunch

AGATA Campaign at GANIL 2015-2017

chair: Silvia Lenzi

- 14:00-14:15 Francois Didierjean (IPHC Strasbourg, France)
Test of the N = 50 neutron gap in the vicinity of ^{78}Ni and systematics of neutron-rich Ge nuclei
- 14:15-14:30 Marco Siciliano (INFN LNL, Italy)
Lifetime measurement in N=Z=50 region
- 14:30-14:45 Rosa Maria Pérez Vidal (IFIC-CSIC Valencia, Spain)
Collectivity along N = 50: the neutron-magic ^{92}Mo and ^{94}Ru
- 14:45-15:00 Damian Ralet (CSNSM Orsay, France)
Towards lifetime and g-factor measurements of short-lived states in the vicinity of ^{208}Pb
- 15:00-15:15 Christoph Fransen (IKP Cologne, Germany)
Evolution of the shell structure in the region of neutron-rich Ti isotopes
- 15:15-15:30 Caterina Michelagnoli (ILL Grenoble)
Evolution of collectivity around N = 40: Lifetime measurements in $^{73,75}\text{Ga}$: Status of the analysis
- 15:30-15:45 Yung Hee Kim (GANIL, France)
Prompt-delayed γ -ray spectroscopy with AGATA, EXOGAM and VAMOS++: Report on the present status of e661
- 15:45-16:00 Coffee
- 16:00-17:30 Closed AGATA Collaboration Council Meeting
- 17:30 End of meeting**