



Ist Topical Workshop on Modern Aspects in Nuclear Structure

Advances in Nuclear Structure with arrays including new scintillator detectors

BORMIO 22 - 25 February 2012

<http://www.mi.infn.it/WSBormio-Milano2012/>

Program

Tuesday 21st February

(Sala Congressi Banca Popolare di Sondrio)

9:00-12:30 **PARIS collaboration Meeting** (Open)

12:30-14:00 **LUNCH**

14:00-18:00 **PARIS collaboration Meeting** (Open)

18:00-19:30 **PARIS collaboration Meeting** (Closed)

The Meeting of the PARIS collaboration is organized by Adam Maj (Adam.Maj@ifj.edu.pl).

The program is available at the web page

http://paris.ifj.edu.pl/Bormio2012/agenda_PARIS.htm

19.30 *Welcome Cocktail*
at Miramonti Park Hotel



20:00 **DINNER**

Wednesday 22nd February: Morning Sessions

(Sala Congressi Banca Popolare di Sondrio)

8:50-9:00 **A. Bracco** (Milano University and INFN)

Welcome

CHAIRMAN: F. AZAIEZ (IPN-Orsay)

9:00-9.30 **T. Motobayashi** (RIKEN, Japan) [[ABSTRACT](#), [TALK](#)]

Spectroscopic studies with NaI(Tl) scintillator arrays DALI/DALI2 using fast RI beams at RIKEN

9:30-10.00 **D. Vretenar** (University of Zagreb) [[ABSTRACT](#), [TALK](#)]

Exotic modes of excitations in nuclei far from stability

10:00-10.25 **S. Siem** (University of Oslo) [[ABSTRACT](#), [TALK](#)]

Level Density and gamma Strength with the OSLO method

10:25-10.40 **B. Loher*** (EMMI/GSI) [[ABSTRACT](#), [TALK](#)]

Photon induced γ - γ coincidence experiments to study the decay pattern of low spin states at the γ^3 -setup at HI γ S

10:40-10.55 **X. Roca-Maza*** (INFN-Milano) [[ABSTRACT](#), [TALK](#)]

Pygmy dipole resonances in stable and unstable nuclei

10:55-11.20 **COFFEE BREAK**

CHAIRMAN: A. MAJ (IFJ PAN, Krakow)

11:20-11.45 **D. Jenkins** (University of York) [[ABSTRACT](#), [TALK](#)]

The PARIS Project

11:45-12:10 **M. Kmiecik** (IFJ PAN, Krakow) [[ABSTRACT](#), [TALK](#)]

Search for Jacobi transitions, status and perspectives (PARIS and SPIRAL2)

12:10-12:25 **M. Ciemala*** (IFJ PAN, Krakow) [[ABSTRACT](#), [TALK](#)]

Monte-Carlo CASCADE based event generator of fusion-evaporation reactions for GEANT4 software

12:25-12:40 **K. Mazurek*** (IFJ PAN, Krakow) [[ABSTRACT](#), [TALK](#)]

Influence of the potential energy landscape on the fission dynamics

12:40-14.30 **LUNCH**

13:30-17.00 **MEETING of GANAS Collaboration**

(Sala Congressi Miramonti Park Hotel)

Wednesday 22nd February: Afternoon Sessions

(Sala Congressi Banca Popolare di Sondrio)

CHAIRMAN: P. REITER (University of Cologne)

17:00-17.30 **J. Simpson** (STFC Daresbury Laboratory) [[ABSTRACT](#), [TALK](#)]
The AGATA Project

17:30-18.00 **S. Lenzi** (University of Padova and INFN) [[ABSTRACT](#), [TALK](#)]
Shape evolution far from stability

18:00-18.15 **N. Pillet** (CEA/DAM/DIF) [[ABSTRACT](#), [TALK](#)]
Low-lying spectroscopy of a few even-even silicon isotopes investigated by means of the multiparticle-multihole Gogny energy density functional

18:15-18.30 **V. Modamio*** (Legnaro Laboratory-INFN) [[ABSTRACT](#), [TALK](#)]
Lifetime measurements in $^{63,65}\text{Co}$

18:30-18.45 **C. Michelagnoli*** (University of Padova and INFN) [[ABSTRACT](#), [TALK](#)]
Lifetime measurement of the 6.79 MeV state in ^{15}O with the AGATA Demonstrator

18:45-19.05 **J. Terasaki** (University of Tsukuba) [[ABSTRACT](#), [TALK](#)]
Testing Skyrme energy-density functionals with the QRPA in low-lying vibrational states of rare-earth nuclei

19:05-19.25 **C. Fahlander** (Lund University) [[ABSTRACT](#), [TALK](#)]
Electromagnetic Properties of Nuclei Close To ^{100}Sn

20:00 **DINNER**

Thursday 23rd February: Morning Sessions

(Sala Congressi Banca Popolare di Sondrio)

CHAIRMAN: A. VITTURI (University of Padova and INFN)

9:00-9.30 **G. DeFrance** (GANIL) [[ABSTRACT](#), [TALK](#)]

Recent Results from GANIL

9:30-10.00 **D. Verney** (IPN-Orsay) [[ABSTRACT](#), [TALK](#)]

*Structure studies in the vicinity of the N=50 shell closure:
recent results from ALTO*

10:00-10.20 **A. Görgen** (University of Oslo) [[ABSTRACT](#), [TALK](#)]

Recoil-distance lifetime measurement after fusion-fission reactions in inverse kinematics

10:20-10.35 **V. Prassa*** (Aristotle University of Thessaloniki) [[ABSTRACT](#), [TALK](#)]

Towards the valley of stability with Energy Density Functionals

10:35-10.50 **C. Schmitt** (GANIL) [[ABSTRACT](#)]

Prompt γ -spectroscopy of isotopically identified fission fragments

10:50-11.20 **COFFEE BREAK**

CHAIRMAN: H. HUBEL (Bonn University)

11:20-11.50 **D. Savran** (EMMI/GSI) [[ABSTRACT](#), [TALK](#)]

Systematics and Structure of the Pygmy Dipole Resonance

11:50-12:10 **P. Mutti** (ILL, Grenoble) [[ABSTRACT](#), [TALK](#)]

EXILL: The Exogam array at the Institut Laue-Langevin

12:10-12:25 **F. Crespi*** (University of Milano) [[ABSTRACT](#), [TALK](#)]

Study of high-lying collective modes with AGATA and LaBr₃Ce scintillation detectors

12:25-12:40 **M. Brenna*** (University of Milano and INFN) [[ABSTRACT](#), [TALK](#)]

Theory of the gamma decay of nuclear giant resonances within the Skyrme framework

12:40-13.30 **LUNCH**

13:30-17.00 **MEETING of
JRA4 INDESYS of ENSAR Collaboration**
(Sala Congressi Miramonti Park Hotel)

Thursday 23rd February: Afternoon Sessions

(Sala Congressi Banca Popolare di Sondrio)

CHAIRMAN: M. THOENNESSEN (MSU)

- 17:00-17.30 **T. Nakatsukasa** (RIKEN Nishina Center) [[ABSTRACT](#), [TALK](#)]
Recent theoretical investigations on properties of low-energy dipole states
- 17:30-18.00 **T. Aumann** (GSI) [[ABSTRACT](#), [TALK](#)]
Quasi-free knockout reactions with radioactive beams at R3B
- 18:00-18.20 **E. Lanza** (INFN-Catania) [[ABSTRACT](#), [TALK](#)]
Collective states excitation in stable and far from stability nuclei via nuclear and Coulomb fields
- 18:20-18.40 **I. Mazumdar** (Tata Institute of Fundamental Research)[[ABSTRACT](#), [TALK](#)]
Studies in GDR and GQR decay from hot rotating heavy nuclei
- 18:40-19:00 **M. Locatelli** (CAEN-Italia) [[ABSTRACT](#), [TALK](#)]
Digital Pulse Processing for physics application
- 19:00-19.15 **R. Peloso*** (Milano Politecnico and INFN) [[ABSTRACT](#), [TALK](#)]
Application of the HICAM camera for imaging of prompt gamma rays in measurements of proton beam range
- 19:15-19.30 **P. Busca*** (Milano Politecnico and INFN) [[ABSTRACT](#), [TALK](#)]
High resolution camera for gamma-ray spectroscopy and imaging in nuclear physics research

20:00 **DINNER**

Friday 24th February: Morning Sessions

(Sala Congressi Banca Popolare di Sondrio)

CHAIRMAN: G. COLO' (University of Milano and INFN)

9:00-9.30 **M. Matsuo** (Niigata University) [[ABSTRACT](#), [TALK](#)]

Surface pairing phenomena in neutron-rich nuclei

9:30-9:50 **E. Vigezzi** (INFN-Milano) [[ABSTRACT](#), [TALK](#)]

Calculation of absolute cross sections of two-nucleon transfer reactions

9:50-10.10 **N. Marginean** (IFIN-HH Bucharest) [[ABSTRACT](#), [TALK](#)]

In-Beam Fast Timing Experiments at the Bucharest TANDEM Laboratory

10:10-10.25 **J. M. Regis*** (University of Köln) [[ABSTRACT](#), [TALK](#)]

*Fast Timing Characteristics of LaBr₃(Ce) Scintillator plus XP20D0
Photomultiplier Detector Assemblies*

10:25-10.55 **T. Neff** (GSI) [[ABSTRACT](#), [TALK](#)]

Fermionic molecular dynamics for the description of light nuclei

10:55-11.20 **COFFEE BREAK**

CHAIRMAN: T. AUMANN (GSI)

11:20-11.50 **O. Tengblad** (IEM-CSIC, Spain) [[ABSTRACT](#), [TALK](#)]

A proton and gamma calorimeter for the R3B set-up at FAIR

11:50-12:05 **H. Alvarez-Pol** (Univ. Santiago de Compostela, Spain) [[ABSTRACT](#), [TALK](#)]

*Design and simulation of a calorimeter/spectrometer for the R3B setup:
the CALIFA BARREL*

12:05-12:30 **B. Pietras*** (GENP-USC, Spain) [[ABSTRACT](#), [TALK](#)]

The DemoZero for CALIFA BARREL: experimental and simulated results

T. Le Bleis* (T.U. Munich) [[ABSTRACT](#), [TALK](#)]

PID and plastic phoswich for CALIFA for R3B

12:30-14.30 **LUNCH**

14:30-17.00 **FREE TIME**

Friday 24th February: Afternoon Sessions

(Sala Congressi Banca Popolare di Sondrio)

CHAIRMAN: S. LUNARDI (University of Padova and INFN)

17:00-17.15 **B. Fornal** (IFJ PAN, Krakow) [[ABSTRACT](#), [TALK](#)]

New experimental opportunities at the Krakow proton cyclotron

17:15-17.45 **M. Thoennessen** (MSU) [[ABSTRACT](#), [TALK](#)]

Going beyond the dripline with MoNA-LISA

17:45-18.00 **A. Gottardo*** (University of Padova and INFN) [[ABSTRACT](#), [TALK](#)]

Shell evolution and effective three-body forces in the newly-explored neutron-rich region around $Z=82$ and far beyond $N=126$

18:00-18:15 **A.I. Morales*** (INFN-Milano) [[ABSTRACT](#), [TALK](#)]

Beta-Decay Spectroscopic Studies Of The Neutron-Rich $^{211,212,213}\text{Tl}$ and ^{219}Bi Isotopes

18:15-18.35 **D. Cano-Ott** (CIEMAT, Madrid) [[ABSTRACT](#), [TALK](#)]

Neutron detectors and related physics

18:35-19.55 **J. Valiente-Dobon** (Legnaro Laboratory-INFN) [[ABSTRACT](#), [TALK](#)]

The NEDA project

18:55-19:10 **G. Jaworski*** (Warsaw Univ. of Technology) [[ABSTRACT](#), [TALK](#)]

How to build neutron multiplicity filter NEDA – simulations and experimental tests

19:10-19:25 **A. Di Nitto*** (INFN Napoli) [[ABSTRACT](#), [TALK](#)]

NEDA – Neutron Detector Array: comparison of digital and analogue pulse-shape discrimination of neutrons and γ -rays

20:00

DINNER

Saturday 25th February: Morning Sessions

(Sala Congressi Banca Popolare di Sondrio)

CHAIRMAN: P. VAN DUPPEN (K.U. LEUVEN)

9:00-9.30 **P. Egelhof** (GSI) [[ABSTRACT](#), [TALK](#)]

The EXL Project @FAIR

9:30-9:55 **P. Doornenbal** (RIKEN, Japan) [[ABSTRACT](#), [TALK](#)]

In-beam gamma-ray spectroscopy at the RIBF: From DALI2 to SHOGUN

9:55-10.15 **D. Balabanski** (IRNE-BAS, Bulgaria) [[ABSTRACT](#), [TALK](#)]

Structure of the iodine nuclei when approaching the $N = 82$ shell

10:15-10.30 **O. J. Roberts*** (University of Brighton, UK) [[ABSTRACT](#), [TALK](#)]

Development of a Fast Timing LaBr₃(Ce) Array for NuSTAR

10:30-10.45 **B. Bruyneel*** (CEA-Saclay, France) [[ABSTRACT](#), [TALK](#)]

Geant4 studies for FATIMA

10:45-11.15 **COFFEE BREAK**

CHAIRMAN: J. STYCZEN (IFJ PAN, Krakow)

11:15-11.35 **A. Krasznahorkay** (ATOMKI, Debrecen, Hungary) [[ABSTRACT](#), [TALK](#)]

Neutron-skin thicknesses from giant resonance studies

11:35-11:50 **L. Stuhl*** (ATOMKI, Debrecen, Hungary) [[ABSTRACT](#), [TALK](#)]

Study of the neutron skin and giant resonances with low energy neutron detector (LENA)

11:50-12:10 **D. Santonocito** (Laboratori Nazionali del Sud-INFN, Catania) [[ABSTRACT](#), [TALK](#)]

Recent results from MEDEA

12:10-12:25 **T. Parascandolo*** (University of Padova and INFN) [[ABSTRACT](#), [TALK](#)]

Dynamical Dipole Mode In Fusion Heavy-Ion Reactions By Using Stable And Radioactive Beams

12:30:14.30 **LUNCH**

14:30-17.00 **OPEN DISCUSSION on
FUTURE PERSPECTIVES at KRAKOW CYCLOTRON LABORATORY**
(Sala Congressi Miramonti Park Hotel)

Saturday 25th February: Afternoon Sessions

(Sala Congressi Banca Popolare di Sondrio)

CHAIRMAN: T. MOTOBAYASHI (RIKEN)

- 17:15-17.45 **P. Van Duppen** (Leuven) [[ABSTRACT](#), [TALK](#)]
Recent results from ISOLDE: shape coexistence in the lead region studied through Coulomb excitation
- 17:45-18.15 **N. Kalantar** (KVI/RuG) [[ABSTRACT](#), [TALK](#)]
Three-nucleon forces and their importance in three-nucleon systems and heavier nuclei
- 18:15-18.35 **F. Gramegna** (Legnaro Laboratory-INFN) [[ABSTRACT](#), [TALK](#)]
Fazia: a detector for nuclear thermo(dynamics)physics using Stable and Exotic beams at SPES and SPIRAL2
- 18:35-18.55 **D. LoPresti** (Catania University and INFN) [[ABSTRACT](#), [TALK](#)]
A real time, large area, high space resolution tracker
- 18:55-19:15 **J. Sharpey Shafer** (University of Western Cape, Johannesburg) [[ABSTRACT](#), [TALK](#)]
The Study of Yrare States with a Medium Sized Array, AFRODITE
- 19:15-19.35 **C. Ur** (Padova University and INFN) [[ABSTRACT](#), [TALK](#)]
The GALILEO project

20:00 *Conference Dinner
at Miramonti Park Hotel*



*During the Conference Dinner the **two best talks** of young **speakers** (**marked by * in the program**) will be rewarded with **cash prizes** given by our **sponsor CAEN**: one on technical developments and one on physics.*