

PROGRAM
Joint LIA COLL-AGAIN COPIGAL POLITA WORKSHOP
26-29 April 2016, LNS Catania

Tuesday, 26 April

Registration and Lunch

14.25 **Welcome** by B. Fornal, F. Gramegna, M. Grasso, M. Lewitowicz

Welcome and Opening Talks. Chairperson: G. Fiorentini

14.35-15.00 **Welcome** by G. Cuttone (LNS Director) & A. Insolia (INFN Ct Director)

15.00-15.15 G. Cuttone (INFN-LNS)

NP in Italy and its relation in the international framework

15.15-15.30 F. Farget (IN2P3)

Nuclear Physics at IN2P3

15.30-15.45 A representative of the Polish Ministry of Science

Session Facilities I. Chairperson: F. Farget

15.45 - 16.10 G. Georgiev (CSNSM Orsay)

ALTO: The 'little big Facility' for nuclear physics at Orsay

16.10 - 16.35 M. Kmiecik (IFJ PAN Krakow)

Collective excitations using proton beam at CCB Krakow - program and preparation measurements

16.35-16.55 Coffee break

Session Facilities II. Chairperson: M. Taiuti

16.55 - 17.20 M. Lewitowicz (GANIL)

Present and future of the GANIL-SPIRAL2 facility

17.20 - 17.45 P. Napiorkowski (HIL UW Warsaw)

Research news from Heavy Ion Laboratory, University of Warsaw

17.45 - 18.10 G. Prete (LNL)

LNL and the SPES project

18.10 - 18.35 D. Rifuggiato (LNS)

LNS and the CS upgrade

Wednesday, 27 April

Session Theory I. Chairperson: N. Alamanos

9.00 - 9.25 S. Burrello (LNS)

Pairing and Symmetry Energy effects in low density nuclear matter: nuclear reactions and neutron stars

9.25 - 9.50 M. Grasso (IPN Orsay)

Tailoring interactions for beyond-mean-field models in EDF theories

9.50 - 10.15 N. Itaco (INFN & Univ. Na)

Realistic Shell Model: Consistently Facing the Four Quadrants around 208Pb

10.15 - 10.40 M. Kowal (NCBJ Warsaw)

Candidates for long-lived high-K ground states in superheavy nuclei

10.40 - 11.00 Coffee break

Session Nuclear Structure I. Chairperson: S. Leoni

11.00 - 11.25 B. Blank (CENBG Bordeaux)

Two-proton radioactivity - a nuclear structure tool beyond the drip line

11.25 - 11.50 F. Crespi (INFN & Univ. Mi)

Review of Selected Experiments on Collective Modes via Gamma Spectroscopy

11.50 - 12.15 E. Clément (GANIL)

Spectroscopic Quadrupole Moment in $^{96,98}\text{Sr}$: Shape coexistence at $N=60$

12.15 - 12.40 A. Goasduff (LNL)

Recent development on electromagnetic moment measurements using plunger techniques at ALTO and LNL

12.40 - 13.05 K. Hadynska (INFN-LNL)

Development of the Coulomb excitation technique at INFN LNL and HIL Warsaw. Status and perspectives

Lunch

Session Theory II. Chairperson: T. Matulewicz

14.45 - 15.10 F. Nowacki (IPHC Strasbourg)

Model Stability From Shell Far

15.10 - 15.35 J. Okolowicz (IFJ PAN Krakow)

Near-threshold clustering

15.35 - 16.00 X. Roca-Maza (INFN Mi)

Dipole polarizability and the neutron skin thickness in nuclei

16.00 - 16.25 M. Warda (UMCS Lublin)

Studies of formation, structure, collective excitations and decay modes of nuclei far from stability, made and planned by the Lublin group of nuclear theory

16.25 - 16.50 Coffee break

Session Nuclear Structure II. Chairperson: F. Staley

16.50 - 17.15 L. Iskra (IFJ PAN Krakow)

Spectroscopic study of neutron-rich Y isotopes produced in fission induced by cold neutrons on various targets

17.15 - 17.40 M. Krzysiek (IFJ PAN Krakow)

Study on the pygmy dipole states in ^{140}Ce using inelastic scattering of ^{17}O

17.40 - 18.05 S. Lenzi (INFN & Univ. Pd)

AGATA - Campaign in GANIL

18.05 - 18.30 I. Stefan (IPN Orsay)

Deep inelastic at 0°

18.30 - 18.55 M. Zielinska (SPhN Saclay)

Onset of deformation in neutron-rich Rb isotopes from Coulomb excitation studies

Thursday, 28 April

Session Instrumentation I. Chairperson: P. Bednarczyk

9.00 - 9.25 D. Beaumel (IPN Orsay)

Development of new Silicon arrays for high resolution transfer studies.

9.25 - 9.50 E. De Filippo (INFN Ct)

Integration of the GET electronics for the CHIMERA + FARCOS devices

9.50 - 10.15 M. Jastrzab (IFJ PAN Krakow)

Application of Diamond Detectors to Proton beam measurements and ultrafast timing

10.15 - 10.40 P. Kulig (UJ Krakow)

Modeling of the signal from silicon detectors in nuclear reactions

10.40 - 11.00 Coffee break

Session Interface Nuclear Structure/reactions. Chairperson: K. Rusek

11.00 - 11.25 M. Cavallaro (LNS)

Transfer reactions and neutron decay studies by the MAGNEX-EDEN facility

11.25 - 11.50 A. Chbihi (GANIL)

In-medium dynamics in nuclear structure

11.50 - 12.15 E. Fioretto (LNL) –

Inverse kinematics experiments with the PRISMA spectrometer

12.15 - 12.40 N. Keeley (NCBJ Warsaw)

Direct Reactions With Light Radioactive Beams

12.40 - 13.05 D. Lacroix (IPN Orsay)

Superfluid effects in nuclear collective motion: applications to fission and other processes

13.05 - 13.30 A. Trzcinska (HIL Warsaw)

Quasielastic barrier distributions studies - influence of weak channels

Lunch

Session Instrumentation II. Chairperson: G. De Angelis

14.45 - 15.10 A. Maj (IFJ PAN Krakow)

The novel gamma calorimeter PARIS – status of the development

15.10 - 15.35 T. Marchi (KU Leuven)

ATS: the Active target for SPES

15.35 - 16.00 H. Savajols (GANIL)

S3 facility at SPIRAL2

16.00 - 16.25 D. Mengoni (INFN & Univ. Pd)

The GALILEO gamma array @LNL: commissioning & experimental campaign

16.25 - 16.50 J.C. Thomas (GANIL)

The DESIR facility at GANIL-SPIRAL2

16.50 - 17.10 Coffee break

Session Dynamics I. Chairperson: M. Lattuada

17.10 - 17.35 R. Bougault (LPC Caen)

Isospin effects in Heavy Ion collisions

17.35 - 18.00 L. Morelli (INFN & Univ. Bo)

***Clustering effects in reactions with light even-even $N=Z$ nuclei.
From the Hoyle state to cluster emission in ^{24}Mg***

18.00 - 18.25 R. Najman (UJ Krakow)

***Investigation of the freeze-out configuration in the $^{197}\text{Au}+^{197}\text{Au}$
reaction at 23 A MeV***

End of Session Theory II:

18.25 - 18.50 T. Duguet (SPhN Saclay)

Ab initio calculations of mid-mass nuclei with chiral interactions

Friday, 29 April

Session Interdisciplinary Research and Applications. Chairperson: P. Moretto

8.45 - 9.10 E. Fagotti

***Design, construction and first operation of the IFMIF Prototype
Accelerator***

9.10 - 9.35 A. Maj and W. Krolas (IFJ PAN Krakow)

***The initiative to host IFMIF/DONES in Poland – status and scientific
program***

9.35 - 10.00 X. Ledoux (GANIL)

The Neutrons For Science Facility at GANIL/SPIRAL-2

10.00 - 10.20 Coffee break

Session Nuclear Astrophysics. Chairperson: J. Jastrzebski

10.20 - 10.45 A. Guglielmetti (INFN & Univ. Mi)

***Nuclear astrophysics underground: the LUNA experiment at Gran
Sasso Laboratory***

10.45 - 11.10 F. Hammache (IPN Orsay)

Study of stellar nucleosynthesis using radioactive beams at GANIL

11.10 - 11.35 M. La Cognata (LNS)

***Nuclear astrophysics with indirect approaches: ANC and Trojan
Horse Method***

11.35 - 12.00 C. Mazzocchi (UW Warsaw)

Study of astrophysically-relevant photo-disintegration reactions

12.00 - 12.25 N. de Sereville (IPN Orsay)

***Astrophysical studies with Splitpole spectrometer at the
ALTO facility***

Lunch

Session Dynamics II. Chairperson: D. Durand

13.45 - 14.10 P. Russotto (INFN-Catania)

***Constraining the symmetry energy at supra-saturation densities:
the ASY-EOS experiment at GSI***

14.10 - 14.35 K. Siwek-Wilczynska (UW Warsaw)

***What can we learn about the reaction mechanism from studies of
 $\text{Au}+\text{Au}$ collisions at 23 MeV/A?***

14.35 - 15.00 G. Verde (IPN Orsay/INFN-Catania)

In-medium characterisation of sources and EoS

Conclusions and Perspectives. Chairperson: A. Pagano

15.00 - 15.25 A. Bracco (Univ. Mi & INFN Mi)

NUPECC & Nuclear Physics in EUROPE