

# CONFERENCE PROGRAM

IT: Invited Talk, S: Seminar

**Sunday, 28<sup>th</sup> of August**

15:00 – 18:00	<b>Registration</b>		
18:00 – 19:00	<b>Dinner</b>		
19:00 – 19:10	<b>Opening</b>		
19:10 – 19:15	<b>Tadeusz Lesiak</b> IFJ PAN, Kraków	Director's Welcome Address	

## Keynote Talk

19:15 – 20:00	IT	<b>Witold Nazarewicz</b> Michigan State University and University of Warsaw	Excitement and challenges in low-energy nuclear physics
20:00	<b>Welcome reception</b>		

Monday, 29<sup>th</sup> of August

### Nuclear Collectivity Workshop

08:30 – 10:30

Chairman Adam Maj

08:30 – 09:00	IT	<b>Takaharu Otsuka</b> University of Tokyo	Prevailing triaxiality in nuclear shapes
09:00 – 09:30	IT	<b>Mark Riley</b> Florida State University	Systematics of band termination at high-spin in $N \sim 90$ nuclei
09:30 – 10:00	IT	<b>Costel Petrache</b> Université Paris-Saclay, IJCLab, Orsay	Chirality, wobbling and oblate rotation
10:00 – 10:30	IT	<b>Elena Litvinova</b> Western Michigan University	Reconciling collectivity, finite temperature and deformation in the relativistic nuclear field theory
10:30 – 11:00	Coffee Break		

### Nuclear Collectivity Workshop

11:00 – 13:00

Chairman Adam Maj

11:00 – 11:30	IT	<b>Xavier Roca-Maza</b> University of Milan and INFN Section of Milan	Nuclear equation of state from nuclear collective excited state properties
11:30 – 12:00	IT	<b>Muhsin Harakeh</b> University of Groningen	Isoscalar Giant Resonances – experiments with radioactive beams and storage rings
12:00 – 12:30	IT	<b>Umesh Garg</b> University of Notre Dame	Nuclear Incompressibility: Does it depend on nuclear structure?
12:30 – 13:00	IT	<b>Franco Camera</b> University of Milan and INFN Section of Milan	Isospin mixing in medium mass nuclei

14:00 – 18:00	Hiking trip		
18:00 – 19:00	Dinner		

## Nuclear Collectivity Workshop

19:00 – 21:15

Chairman Muhsin Harakeh

19:00 – 19:20	IT	<b>Katarzyna Mazurek</b> IFJ PAN Kraków	The pre-equilibrium emission of light charged particles and the GDR strength functions
19:20 – 19:40	IT	<b>Michał Ciemala</b> IFJ PAN Kraków	Feeding of the isomers of different deformations via GDR gamma decay studied with nuBall + PARIS
19:40 – 20:00	IT	<b>Natalia Cieplicka-Oryńczak</b> IFJ PAN Kraków	M4 resonances in light nuclei studied at CCB
20:00 – 20:15	S	<b>Barbara Wasilewska</b> University of Cologne	The systematic study of Pygmy Dipole States in $^{40,44,48}\text{Ca}$ induced in the $(p,p'\gamma)$ reaction
20:15 – 20:30	S	<b>Florian Kluwig</b> University of Cologne	Investigation of low-lying dipole excitations with real photon-scattering experiments
20:30 – 20:45	S	<b>Maria Markova</b> University of Oslo	Evolution of the Pygmy Dipole Resonance in Sn Isotopes
20:45 – 21:00	S	<b>Virender Ranga</b> Indian Institute of Technology Roorkee	Measurements of $\gamma$ -rays from $^{16}\text{O}(p,p'\gamma)^{16}\text{O}$ reaction
21:00 – 21:15		<b>Mark Riley</b> Florida State University	Ben Mottelson and Bent Herskind - memories

Tuesday, 30<sup>th</sup> of August

**Nuclear Astrophysics Workshop**  
**08:30 – 10:00**  
**Chairman Witold Nazarewicz**

08:30 – 09:00	IT	<b>Iris Dillmann</b> TRIUMF, Vancouver	The TRISR project – a storage ring for neutron captures on radioactive nuclei
09:00 – 09:30	IT	<b>Sakib Rahman</b> University of Manitoba	Constraints on neutron-star radii from laboratory experiments
09:30 – 09:45	S	<b>Karolina Kolos</b> Lawrence Livermore National Laboratory, Livermore	Isomer studies for r-process nucleosynthesis
09:45 – 10:00	S	<b>Andras Vitéz-Sveicz</b> Institute for Nuclear Research ATOMKI, Budapest	Beta-decay properties of neutron-rich lanthanides and the formation of the rare-earth peak

**Special Lecture**

10:00 – 10:30	IT	<b>Marek Lewitowicz</b> GANIL, Caen and NuPECC	NuPECC Long Range Plan 2024 for nuclear physics in Europe
10:30 – 11:00	<b>Coffee Break</b>		

**Super Heavy Elements**  
**11:00 – 13:00**  
**Chairman Krzysztof Rykaczewski**

11:00 – 11:10		<b>Krzysztof Rykaczewski</b> Oak Ridge National Laboratory	Introduction to SHE
11:10 – 11:40	IT	<b>Dieter Ackermann</b> GANIL, Caen	Nuclear isomers in the heaviest nuclei and the odd nucleon as a sensitive probe of low-lying nuclear structure
11:40 – 12:10	IT	<b>Hideyuki Sakai</b> RIKEN Nishina Center	Facility upgrade for SHE research at RIKEN
12:10 – 12:30	S	<b>Michał Kowal</b> National Centre for Nuclear Research, Warsaw	New possibilities for production of super-heavy nuclei
12:30 – 12:45	S	<b>Masaomi Tanaka</b> RIKEN Nishina Center	Optimal energy for element 119 synthesis via $^{51}\text{V} + ^{248}\text{Cm}$ reaction probed by quasielastic barrier distribution measurement
12:45 – 13:00	S	<b>Janusz Skalski</b> National Centre for Nuclear Research, Warsaw	High-K ground states & isomers in superheavy nuclei
13:00 – 14:00	<b>Lunch</b>		

**Parallel Sesion A**  
**16:00 – 18:00**  
**Chairman Dieter Ackermann**

16:00 – 16:15	S	<b>Tomasz Cap</b> National Centre for Nuclear Research, Warsaw	Diffusion as a possible mechanism controlling the production of superheavy nuclei in cold and hot fusion reactions
16:15 – 16:30	S	<b>Rikel Chakma</b> GANIL, Caen	Status of the SIRIUS detector array and investigation of the properties of $^{252}\text{Fm}$
16:30 – 16:45	S	<b>Ablaihan Utepov</b> GANIL, Caen	Multinucleon transfer reactions in the $^{238}\text{U}+^{238}\text{U}$ system studied with the VAMOS + AGATA + ID-Fix
16:45 – 17:00	S	<b>Kieran Kessaci</b> Strasbourg University	Spectroscopic studies of the neutron-rich $^{255/256}\text{No}$
17:00 – 17:15	S	<b>Anna Zdeb</b> Maria Curie-Skłodowska University, Lublin	Multidimensional PES in spontaneous fission
17:15 – 17:30	S	<b>Daniel Fernández</b> University of Santiago de Compostela	Experimental study of high-energy fission and quasi-fission dynamics with fusion-induced fission reactions at VAMOS++
17:30 – 17:45	S	<b>Jorge Romero</b> University of Jyväskylä	Nuclear reaction studies at MARA focusing on prospects for the new MARA-LEB facility
17:45 – 18:00	S	<b>Andrew Briscoe</b> University of Jyväskylä	Discovery of $^{160}\text{Os}$ & $^{156}\text{W}$ , and increasingly sensitive spectroscopy of the most neutron-deficient N=84 isotones
18:00 – 19:00	<b>Dinner</b>		

**Parallel Sesion B**  
**16:00 – 18:00**  
**Chairman Magdalena Górska**

16:00 – 16:15	S	<b>Julgen Pellumaj</b> INFN Laboratori Nazionali di Legnaro	Lifetime measurements for nuclei in the $f_{7/2}$ shell using the AGATA spectrometer
16:15 – 16:30	S	<b>Line Gaard Pedersen</b> University of Oslo	First spectroscopy of neutron rich odd-odd $^{74,76,78}\text{Cu}$
16:30 – 16:45	S	<b>Kseniia Rezykina</b> INFN Section of Padova	Structure of $^{83}\text{As}$ , $^{85}\text{As}$ and $^{87}\text{As}$ : from semi-magicity to $\gamma$ -softness
16:45 – 17:00	S	<b>Desislava Kalaydjieva</b> IRFU, CEA Saclay, Université Paris-Saclay	Multiple shape coexistence in $^{100}\text{Zr}$
17:00 – 17:15	S	<b>Giorgia Pasqualato</b> IJCLab, Université Paris-Saclay, Orsay	Lifetime measurements in $^{105}\text{Sn}$ : nuclear structure studies close to the $N=Z=50$ shell closure
17:15 – 17:30	S	<b>Aurora Ortega Moral</b> LP2iB, Bordeaux	Neutron-deficient exotic decays in the $^{48}\text{Ni}$ region with ACTAR TPC
17:30 – 17:45	S	<b>Magdalena Kuich</b> University of Warsaw	Active target TPC for study of photonuclear reactions at astrophysical energies
17:45 – 18:00	S	<b>Adam Kubiela</b> University of Warsaw	Neutron deficient Zn isotopes studied with the Optical TPC detector
18:00 – 19:00	<b>Dinner</b>		

**CAEN educational kit presentation**  
**&**  
**POSTER SESSION**  
**19:00 – 21:30**

Wednesday, 31<sup>st</sup> of August

### Structure of Exotic Nuclei Workshop

08:30 – 10:30

Chairman Bogdan Fornal

08:30 – 09:00	IT	<b>Silvia Leoni</b> University of Milan and INFN Section of Milan	Gamma-ray spectroscopy of bound and unbound states in B, C, N and O isotopes as a test-bench of nuclear structure theory
09:00 – 09:30	IT	<b>Sean Freeman</b> CERN & University of Manchester	Transfer reactions with solenoidal spectrometers
09:30 – 10:00	IT	<b>Hans Fynbo</b> Aarhus University	Experiments on light $n\alpha$ nuclei $^8\text{Be}$ , $^{12}\text{C}$ and $^{16}\text{O}$
10:00 – 10:15	S	<b>Paul Garrett</b> University of Guelph	$E0$ transitions in $^{188}\text{Hg}$ and evidence of multiple shape coexistence
10:15 – 10:30	S	<b>Magda Zielińska</b> IRFU, CEA, Université Paris-Saclay	Quadrupole and octupole collectivity in $^{96}\text{Zr}$ from Coulomb-excitation studies with the Q3D magnetic spectrograph
10:30 – 11:00	Coffee Break		

### Structure of Exotic Nuclei Workshop

11:00 – 13:15

Chairman Marek Pfützner

11:00 – 11:30	IT	<b>Michail Athanasakis-Kaklamanakis and Gerda Neyens</b> CERN, Geneva/KU Leuven	Laser spectroscopy at ISOLDE and new opportunities with radioactive molecules
11:30 – 12:00	IT	<b>Daniel Hoff</b> LLNL, Livermore	A crack in nuclear mirror symmetry
12:00 – 12:30	IT	<b>Deuk Soon Ahn</b> CENS, Institute for Basic Science, Daejeon	Location of the Neutron Dripline at F, Ne, and Na
12:30 – 12:45	S	<b>Noritaka Kitamura</b> University of Tennessee	First beta-delayed neutron spectroscopy of $^{24}\text{O}$
12:45 – 13:00	S	<b>Clement Delafosse</b> Université Paris-Saclay, IJCLab, Orsay	First trap-assisted decay spectroscopy of the $^{81}\text{Ge}$ ground state



13:00 – 13:15	S	<b>Premaditya Chhetri</b> KU Leuven	First observation of the radiative decay of $^{229}\text{Th}$ low-lying isomer: recent results from ISOLDE
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14:00 – 18:00	<b>Hiking trip</b>		
18:00 – 19:00	<b>Dinner</b>		

**Evenng Session**  
**19:00 – 21:30**  
**Chairman Andrzej Gózdź**

19:00 – 19:30	IT	<b>Fedir Ivanyuk</b> Institute for Nuclear Research, Kyiv; <b>Krzysztof Pomorski</b> Maria Curie Skłodowska University, Lublin	The fission observables of heavy and super-heavy nuclei
19:30 – 20:00	IT	<b>Nicholas Keeley</b> National Centre for Nuclear Research, Otwock	Near-barrier elastic scattering of $^{17}\text{Ne}$ from $^{208}\text{Pb}$
20:00 – 20:30	IT	<b>Pietro Spagnoletti</b> Simon Fraser University, British Columbia	Experimental investigations of octupole collectivity in atomic nuclei
20:30 – 21:00	IT	<b>Giacomo De Angelis</b> INFN Laboratori Nazionali di Legnaro	Shell Structure of the very n-rich Ni isotopes and the REMO project
21:00 – 21:15	S	<b>Wojciech Satuła</b> University of Warsaw	Charge-dependent DFT: formalism and selected applications
21:15 – 21:30	S	<b>Arnoldas Deltuva</b> Vilnius University	New developments in the description of four-nucleon continuum

Thursday, 1<sup>st</sup> of September

**Morning Session**  
**08:30 - 10:30**  
**Chairman Elena Litvinova**

08:30 - 09:00	IT	<b>Martin Freer</b> University of Birmingham	Insights into the structure of light nuclei
09:00 - 09:30	IT	<b>Marek Płoszajczak</b> GANIL, Caen	Nuclear physics at the edge of stability
09:30 - 10:00	IT	<b>Gaute Hagen</b> Oak Ridge National Laboratory	Recent progress in <i>ab-initio</i> computations of nuclei
10:00 - 10:30	IT	<b>Jacek Golak</b> Jagiellonian University	Few-nucleon Ssystems for nuclear physics
10:30 - 11:00	<b>Coffee Break</b>		
11:00 - 19:00	<b>Excursion</b>		
19:00 - 23:00	<b>Regional Dinner</b>		

Friday, 2<sup>nd</sup> of September

**NUSTAR and APPA at FAIR Workshop**  
**08:30 – 10:30**  
**Chairman Wolfram Korten**

08:30 – 09:00	IT	<b>Paolo Giubellino</b> FAIR/GSI, Darmstadt	FAIR, the Universe in the Lab
09:00 – 09:30	IT	<b>Giovanna Benzoni</b> INFN Section of Milan	Recent results from the DESPEC campaign at GSI
09:30 – 10:15	IT	<b>Yury Litvinov</b> GSI, Darmstadt	Precision experiments with heavy-ion storage rings
10:15 – 10:30	S	<b>Marta Poletti</b> University of Milan	Search for octupole deformation in $A \sim 225$ Po-Fr nuclei
10:30 – 11:00	<b>Coffee Break</b>		

**NUSTAR and APPA at FAIR Workshop**  
**11:00 – 13:00**  
**Chairman Wolfram Korten**

11:00 – 11:30	IT	<b>Yoshiki Tanaka</b> RIKEN Cluster for Pioneering Research	WASA-FRS experiments in FAIR Phase-0 at GSI
11:30 – 12:00	IT	<b>Haik Simon</b> GSI, Darmstadt	Experiments: from ALADIN-LAND to $R^{3B}$ at GSI and FAIR
12:00 – 12:15	S	<b>Jianwei Zhao</b> GSI, Darmstadt	Studies of exotic nuclei with the FRS Ion Catcher at GSI
12:15 – 12:30	S	<b>Jose Luis Rodríguez-Sánchez</b> Universidad de Santiago de Compostela	Nuclear fission studies in inverse kinematics with the $R^{3B}$ setup at the GSI-FAIR facility
12:30 – 12:45	S	<b>Aleksandrina Yaneva</b> GSI, Darmstadt	Lifetime measurement below the $14^{+}$ isomer in $^{94}\text{Pd}$
12:45 – 13:00	S	<b>Victor Guadilla</b> University of Warsaw	Results of DTAS campaign at IGISOL: overview

14:00 – 18:00	<b>Hiking trip</b>		
18:00 – 19:00	<b>Dinner</b>		

**Parallel Sesion C**  
**19:00 – 20:00**  
**Chairman Magda Zielińska**

19:00 – 19:15	S	<b>Corinna Henrich</b> Technische Universität Darmstadt	Coulomb excitation of $^{142}\text{Xe}$
19:15 – 19:30	S	<b>Jordan Reilly</b> University of Manchester	The first charge radii measurements of $^{33,34}\text{Al}$ transitioning into the $N = 20$ island of inversion
19:30 – 19:45	S	<b>Alejandro Ortiz-Cortes</b> GANIL, Caen	Collinear laser spectroscopy on the palladium isotopic chain
19:45 – 20:00	S	<b>Bram van den Borne</b> KU Leuven	Approaching $N=82$ through silver using laser spectroscopy

**Parallel Sesion D**  
**19:00 – 20:30**  
**Chairman Silvia Leoni**

19:00 – 19:15	S	<b>Eliana Masha</b> Helmholtz-Zentrum Dresden-Rossendorf	Study of the $^{20}\text{Ne}(p, \gamma)^{21}\text{Na}$ reaction at LUNA
19:15 – 19:30	S	<b>Deni Nurkić</b> University of Zagreb	Cluster states in $^{14}\text{C}$ and $^{15}\text{C}$ studied with the $^{10}\text{Be}+^9\text{Be}$ reactions
19:30 – 19:45	S	<b>Giacomo Corbari</b> University of Milan	Gamma decay from the near-neutron-threshold $2^+$ state in $^{14}\text{C}$ : a probe of collectivization phenomena in light nuclei
19:45 – 20:00	S	<b>Nikola Vukman</b> Ruđer Bošković Institute, Zagreb	Helium clustering in neutron-rich Be isotopes
20:00 – 20:15	S	<b>Monika Piersa-Siłkowska</b> CERN, Geneva	First $\beta$ -decay spectroscopy of $^{135}\text{In}$ and new $\beta$ -decay branches of $^{134}\text{In}$
20:15 – 20:30	S	<b>Lama Al Ayoubi</b> University of Jyväskylä	Beta decays of $^{82,83}\text{Ga}$ studied at the ALTO facility

Saturday, 3<sup>rd</sup> of September

**Morning Session 1**  
**08:30 – 10:45**  
**Chairman Franco Camera**

08:30 – 09:00	IT	<b>Kathrin Wimmer</b> GSI, Darmstadt	In-beam gamma-ray spectroscopy with HiCARI
09:00 – 09:30	IT	<b>Jose Javier Valiente-Dobón</b> INFN Laboratori Nazionali di Legnaro	The gamma-ray tracking array AGATA at LNL
09:30 – 10:00	IT	<b>Herve Savajols</b> GANIL, Caen	The Super Separator Spectrometer (S <sup>3</sup> ) for the very high intensity beams of SPIRAL2
10:00 – 10:30	IT	<b>Jonathan Wilson</b> IJC Lab, Orsay	Gamma-ray spectroscopy of nuclear fission
10:30 – 10:45	S	<b>Grzegorz Jaworski</b> Heavy Ion Laboratory, University of Warsaw	NEEDLE – fast neutron detection in the service of the gamma spectroscopy of neutron-deficient nuclei at HIL
10:45 – 11:15	<b>Coffee Break</b>		

**Morning Session 2**  
**08:30 – 10:45**  
**Chairman Marek Lewitowicz**

11:15 – 11:45	IT	<b>Marek Pfützner</b> University of Warsaw	Exotic decays with emission of charged particles
11:45 – 12:00	S	<b>Konrad Czerski</b> University of Szczecin	Branching ratio of the deuteron-deuteron threshold resonance in <sup>4</sup> He
12:00 – 12:15	S	<b>Martin Venhart</b> Institute of Physics, SAS, Bratislava	Nuclear structure of <sup>181,183</sup> Au isotopes studied via $\beta^+$ /EC decays of <sup>181,183</sup> Hg at ISOLDE
12:15 – 12:35	IT	<b>Krzysztof Rykaczewski</b> Oak Ridge National Laboratory	Beta-decay studies with the Modular Total Absorption Spectrometer
12:35 – 12:45	<b>NuPECC Best Poster Award and NAWA Certificates Ceremony</b>		

## Special Lecture and Closing Ceremony

12:45 – 13:30

Chairman Bogdan Fornal

12:45 – 13:15	IT	<b>Philippe Chomaz</b> CEA, France	Quantum Computing - one of hot topics in science
13:15 – 13:30	Closing		
14:00 – 19:00	Hiking trip		
19:00	Conference BANQUET		

## Sunday, 4<sup>th</sup> of September

06:00	Departure to Kraków
07:30	Breakfast
10:00	Departure to Kraków