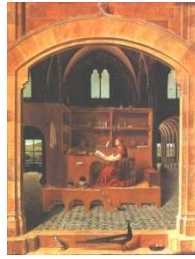




International Conference on  
**Nuclear reactions on**



**FBP**  
FONDAZIONE  
BONINO-PULEJO  
MESSINA

**Nucleons and Nuclei**

Messina (Italy)

October 5-9, 2009

## Program of the Conference

### October 4, Sunday

18:30-21:00 Registration (Main Building of the Messina University – Piazza Pugliatti)

19:00-21:00 Welcoming Reception (Main Building of the University – Piazza Pugliatti)

### October 5, Monday

8:30-10:30 Registration (Secretary Desk near the "Aula Magna" of the University – Piazza Pugliatti )

9:45-10:30 Opening addresses ("Aula Magna" of the University – Piazza Pugliatti )

10:30-10:50 Coffee Break

10:50 **Open Session for the Nuclear Reactions on Nuclei**  
**Chairman: Adam Sobiczewsky**

10:50-11:35 **Birger B. Back** (Argonne National Laboratory) : *“The HELIOS spectrometer and the radioactive beam program at Argonne”*

- Open Session for the Nuclear Reactions on Nucleons**
- 11:40 **Chairman: Carlo Schaerf**
- 11:40-12:20 **Kees de Jager** (Jefferson Laboratory, Newport) : *“The SuperBigBite project”*
- 12:20-13:00 Registration (Secretary Desk near the "Aula Magna" )
- 13:00 -15:00 Lunch Time
- 15:00 "Aula Magna" of the University – Piazza Pugliatti
- 15:00-17:00 Registration (Secretary Desk near the "Aula Magna" of the University)
- Chairman for the Nuclear Reactions on Nuclei : Avazbek Nasirov**  
**Chairman for the Nuclear Reactions on Nucleons: Rachele Di Salvo**
- 15:00-15:40 **Giorgio Giardina** (University of Messina) : *“Expectations and limits to synthesize nuclei with  $Z \geq 120$ ”*
- 15:45-16:25 **Bernd Krusche** (University of Basel) : *“Photoproduction of mesons off the deuteron and other light nuclei”*
- 16:30-16:50 Coffee Break
- 16:50-17:30 **Mikhail Itkis** (Flerov Laboratory-JINR of Dubna) : *“Fusion-fission and quasifission properties of superheavy nuclei”*
- 17:35-18:15 **Hartmut Schmieden** (University of Bonn-ELSA) : *“The BGO-OpenDipole Setup - New Experimental Perspectives at ELSA”*
- 18:20-18:40 **Sergei Maydanyuk** (INR of Kiev) : *“Bremsstrahlung emission accompanying decays, fission and collisions”*

## October 6, Tuesday

09:00

"Aula Magna" of the University

**Chairman for the Nuclear Reactions on Nucleons: Kees de Jager**

**Chairman for the Nuclear Reactions on Nuclei : Mikhail Itkis**

09:00-9:40 **Charles Hyde** (University Blaise Pascal, Clermont-Ferrand) : “*Nucleon Tomography through a study of Generalized Parton Distributions*”

09:45-10:25 **Adam Sobiczewsky** (Soltan Institute, Warsaw) : “*Properties of heaviest nuclei at the saddle-point configuration*”

10:30-10:50 Coffee Break

10:50-11:30 **Andy Sandorfi** (Jefferson Laboratory, Newport) : “*Unraveling the Spectrum of the Nucleon*”

11:35-12:15 **Yu-Gang Ma** (Institute of Applied Physics, Shanghai) : “*Studies on p-p momentum correlation function of  $^{23}\text{Al}$* ”

12:20-13:00 Registration (Secretary Desk near the "Aula Magna" )

13:00 -15:00 Lunch Time

15:00

"Aula Magna" of the University

**Chairman for the Nuclear Reactions on Nuclei : Giorgio Giardina**

**Chairman for the Nuclear Reactions on Nucleons: Hartmut Schmieden**

15:00-15:40 **Avazbek Nasirov** (Bogoliubov Laboratory-JINR of Dubna) : “*Mechanisms producing fission-like binary fragments in heavy ion collisions*”

15:45-16:25 **Giuseppe Mandaglio** (University of Messina) : “*Beam asymmetry  $\Sigma$  and invariant mass measurements on the  $\pi^-$  photoproduction*”

16:30-16:50 Coffee Break

16:50-17:30 **Shinichi Mitsuoka** (JAEA of Tokai) : “*Barrier distribution of quasi-elastic backward scattering in very heavy reaction systems*”

17:35-18:15 **Krishna Kumar** (University of Massachusetts, Amherst) : “*Low-energy Tests of the Standard Model*”

18:20-18:40 **Olga Fotina** (INP of Moscow) : “*Preequilibrium effects in the secondary particle spectra in the reactions with heavy ions*”

## October 7, Wednesday

09:00

"Aula Magna" of the University

**Chairman for the Nuclear Reactions on Nucleons: Bernd Krusche**

**Chairman for the Nuclear Reactions on Nuclei : Birger B. Back**

09:00-9:40

**Daniel Elsner** (University of Bonn-ELSA) : *“Polarised photon beams at ELSA and recent results of double polarisation measurements”*

09:45-10:25

**Sergey Dmitriev** (Flerov Laboratory-JINR of Dubna) : *“Chemical Identification and Study of properties of Superheavy Elements”*

10:30-10:50 Coffee Break

10:50-11:30

**Hideki Kohri** (University of Osaka) : *“Polarized HD target for future LEPS experiments at SPring-8 in Japan”*

11:35-12:15

**Kim Lister** (Argonne National Laboratory) : *“Precision measurements of electromagnetic matrix elements in  $^{10}\text{Be}$  as a test of ab-initio calculations”*

12:30 -14:30 Lunch Time

### **Afternoon-Evening: Visit of Taormina, and Conference Dinner**

14:45 Departure by Bus from the University to Taormina.

19:30-21:30 Conference Dinner at the “Paradise Ristorante” along the road between “Giardini Naxos” and “Gole Alcantara”.

22:00 Departure by Bus to Messina

## October 8, Thursday

09:00

"Aula Magna" of the University

**Chairman: Yu-Gang Ma**

09:00-9:40 **Massimo Di Toro** (University of Catania, LNS-INFN) : *“Probing the Nuclear Matter at High Baryon and Isospin Density with Heavy-Ion-Collisions”*

09:45-10:25 **Ajit Mohanty** (BARC of Mumbai) : *“A double barrier penetration model for fusion at deep-barrier energies”*

10:30-10:50 Coffee Break

**Chairman: Shinichi Mitsuoka**

10:50-11:30 **Marco Mazzocco** (University of Padova) : *“Reaction dynamics for light RIB’s at near-barrier energies”*

11:35-12:15 **Basant Nayak** (BARC of Mumbai) : *“A new hybrid surrogate ratio method for neutron-induced fission cross section measurements of short-lived actinides”*

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09:00

Room of the "Accademia Peloritana"

**Chairman: Alessia Fantini**

09:00-9:40 **Eugene Chudakov** (Jefferson Laboratory, Newport) : *“Meson Spectroscopy”*

09:45-10:25 **Marco Battaglieri** (INFN of Genova) : *“Present and future of hadron spectroscopy at Jefferson Lab”*

10:30-10:50 Coffee Break

**Chairman: Hans-Jürgen Arends**

10:50-11:30 **Leonid Kaptari** (Bogoliubov Laboratory-JINR of Dubna) : *“ $\omega$  and  $\eta$  ( $\eta'$ ) mesons from NN and ND collisions at intermediate energies”*

11:35-12:15 **Paolo Pedroni** (INFN of Pavia) : *“Photoproduction on the Deuteron in double polarization and the GDH sum rule for the Neutron”*

13:00 -15:00 Lunch Time

15:00 "Aula Magna" of the University

**Chairman: Ajit Mohanty**

15:00-15:40 **Dimitra Pierrousakou** (INFN of Napoli) : “*Dynamical dipole mode in fusion heavy-ion reactions*”

15:45-16:25 **Wen-Dong Tian** (Institute of Applied Physics, Shanghai) : “*Isoscaling effect in statistical sequential decay model and projectile fragmentation*”

16:30-16:50 Coffee Break

**Chairman: Massimo Di Toro**

16:50-17:10 **Francesca Amorini** (LNS-INFN, Catania) : “*Study of exotic beams induced reactions in the region of  $^{11}\text{Be}$  with CHIMERA array*”

17:15-17:35 **Yong Chung** (University of Hallym) : “*Estimation on Stopping Powers of Superheavy Ion with  $Z=120$  and  $A=300$  in Several Media*”

17:40-18:00 **Francesca Giacoppo** (University of Messina, LNS-INFN) : “*Two -Proton radioactivity of  $^{18}\text{Ne}$* ”

18:05-18:25 **Ivan Lombardo** (University of Catania, LNS-INFN) : “*Dynamical and thermodynamical properties of incomplete fusion events at 25 MeV/A*”

18:30-18:50 **Valentina Scuderi** (University of Catania, LNS-INFN) : “*Structure effects in collisions induced by halo and weakly bound nuclei around the Coulomb barrier*”

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15:00 Room of the "Accademia Peloritana"

**Chairman: Krishna Kumar**

15:00-15:40 **Hans-Jürgen Arends** (University of Mainz) : “*Overview on the baryonic resonance program at MAMF*”

15:45-16:25 **Andreas Thomas** (University of Mainz) : “*Recent Results from the Real Photon Experiment at MAMI*”

16:30-16:50 Coffee Break

**Chairman: Giuseppe Mandaglio**

- 16:50-17:30 **Michael Lang** (University of Bonn-ELSA) : “*Upgrade of the CBELSA/TAPS Experiment at ELSA for  $\eta$  and  $\eta'$  decays*”
- 17:35-17:55 **Stefania Bufalino** (INFN and University of Torino) : “*Mesonic weak decay of  $\Lambda$ -Hypernuclei: a new tool for the spectroscopic study of hypernuclei*”
- 18:00-18:20 **Marina Manganaro** (University of Messina) : “*Preliminary results on the  $\eta'$  photoproduction at Graal*”

## October 9, Friday

09:00 "Aula Magna" of the University

**Chairman: Dmitri Eremenko**

- 09:00-9:40 **Yoshihiro Aritomo** (Flerov Laboratory-JINR of Dubna) : “*Fusion-fission and quasi-fission processes in reactions using actinide target nuclei*”
- 09:45-10:05 **Victor Karnaukhov** (JINR of Dubna) : “*Hot Nuclei: Comparative Study of Formation Disintegration in Collisions of Light Relativistic Projectiles with Heavy Target*”
- 10:10-10:30 **Sergey Markochev** (Moscow Institute of Physics and Technology, Dolgoprudny) : “*New experimental method of investigation rare nuclear transformations accompanying atomic processes: bremsstrahlung emission in spontaneous fission of  $^{252}\text{Cf}$* ”

10:35-10:55 Coffee Break

**Chairman: Alessia Di Pietro**

- 10:55-11:30 **Sergey Artemov** (INP of Tashkent) : “*Estimation of the astro s-factors of proton radiative capture by  $^{10}\text{B}$  and  $^{24}\text{Mg}$  nuclei at the extremelly low energies using the ANCs from proton transfer reactions*” + contribution of Nie
- 11:35-11:55 **Vladislav Olkhovsky** (INR of Kiev) : “*New developments in time analysis of low-energy and high-energy nuclear processes*”

12:00-12:40 **Dmitri Eremenko** (INP of Moscow) : “*Dynamic model of angular distributions of fission and quasi-fission fragments*” + contributions of Platonov and Yuminov.

09:00 Room of the "Accademia Peloritana"

**Chairman: Paolo Pedroni**

09:00-9:40 **Sergio Pereira** (LNF – INFN, Frascati) : “*Hyperon production and polarization with CLAS and CLAS12 at JLab*”

09:45-10:25 **Guido Urciuoli** (ISS – INFN, Roma) : “*A model-independent measurement of the neutron radius in  $^{208}\text{Pb}$* ”

10:30-10:50 Coffee Break

**Chairman: Marina Manganaro**

10:50-11:10 **Valentina Vegna** (University of Roma Tor Vergata and INFN) : “*OMEGA photoproduction at GRAAL*”

11:15-11:35 **Alexander Mushkarenkov** (INFN of Pavia) : “*Photoproduction of  $\pi^0\pi^+$  on the deuteron at  $E_\gamma = 0.7-1.5 \text{ GeV}$* ”

11:40-12:00 **Swapan Das** (BARC of Mumbai) : “*Decay of omega meson produced in the  $(\gamma, \pi^0\gamma)$  reaction on Nb nucleus*”

13:00 -15:00 Lunch Time

15:00 "Aula Magna" of the University

**Chairman: Yoshihiro Aritomo**

15:00-15:20 **Grzegorz Kaminski** (JINR of Dubna) : “*Study of isotope and velocity distributions of light fragments in the  $^{11}\text{B}(32.9 \text{ A MeV}) + ^9\text{Be}(^{27}\text{Al}, ^{197}\text{Au})$  reactions*”

15:25-15:45 **Evgeny Konobeevski** (INR of Moscow) : “*Study of the nd-breakup reaction at neutron energy of 40-60 MeV*”

15:50-16:10 **Juan Alcantara** (University of Santiago) : “*Energy dependence of heavy-ion collisions above 200 A MeV*”

16:15-16:35 Coffee Break



**Chairman: Vladislav Olkhovsky**

- 16:35-17:15 **Orest Povoroznik** (INR of Kiev) : “*Particle decay spectroscopy of lightest nuclei*” + Contributions of Gorpinich, Jachmenjov and Ponkratenko
- 17:20-17:40 **Yurii Pavlenko** (INR of Kiev) : “*Decay properties of short lived resonances of light nuclei in many-particle nuclear reactions*”