

MAGNET 2010 International Workshop

INFN Laboratori Nazionali del Sud

December 14 – 16, 2010

Scientific Program

Tuesday December 14

14:00 – 15:00 Registration

Chair: A. Cunsolo

15:00 – 15:15 M.Lattuada, LNS Director – welcome

15:15 – 15:45 *Spectroscopy at the dripline*

H.Lenske, Univ. Giessen, Germany

15:45 – 16:15 *BigRIPS separator and ZeroDegree spectrometer and other spectrometers at RIKEN RIBF*

H. Takeda, RIKEN, Japan

16:15 – 16:45 *Magnetic Spectrometer High resolution (MAVR) at FLNR JINR (Dubna)*

Y. Penionzhkevich, JINR, Russia

16:45 – 17:30 **Coffee Break**

Chair: L. Corradi

17:30 – 17:55 *S3: The Super Separator Spectrometer for SPIRAL2 stable beams*

H.Savajols, GANIL, France

17:55 – 18:20 *Ion-optics development for the Super Separator Spectrometer S3*

D. Boutin, GANIL, France

18:20 – 18:45 *The MUSETT implantation detector and the future detection set-up for the Super Separator Spectrometer*

A.Drouart, CEA/Saclay, Irfu, France

19:30 Bus to Catania downtown

Wednesday December 15

Chair: L. Calabretta

09:00 – 09:30 *Elastic break-up of halo nuclei with eikonal models*

D.Baye, Univ. Bruxelles, Belgium

09:30 – 10:00 *A compact high-resolution isobar separator for the CARIBU project*

C. Davids, Argonne National Laboratory, US

10:00 – 10:30 *Large acceptance spectrometer for deep inelastic scattering with re-accelerated radioactive beams*

G. Souliotis, Univ. Athens, Greece

10:30 – 11:15 *Coffee Break*

Chair: H. Lenske

11:15 – 11:40 *Production of extremely neutron-rich fragments with a 48Ca ion beam by a zero-degree magnetic spectrometer*

S. Lukyanov, Flerov laboratory, JINR, Russia

11:40 – 12:05 *Search for the Giant Pairing Vibration through (*p,t*) reactions around 50 and 60 MeV*

S. Franchoo, CNRS, France

12:05 – 12:30 *Perspectives with the MAGNEX-EDEN facility at LNS*

M.Cavallaro, INFN-LNS, Italy

12:30 – 12:55 *Multineutron transfer reactions with MAGNEX*

D. Carbone, INFN-LNS, Italy

12:55 – 15:00 **Lunch**

Chair: N. Alamanos

15:00 – 15:25 *Exploring the symmetry energy and nuclear level density parameter by means of the coupling of the 4π detector and spectrometer*

A.Chibihi, GANIL, France

15:25 – 15:50 *What we could learn so far with large solid angle spectrometer PRISMA and the implications for future experiments*

L. Corradi, INFN-LNL, Italy

15:50 – 16:15 *The heavy-ion magnetic spectrometer PRISMA*

E. Fioretto, INFN-LNL, Italy

16:15 – 16:40 *Population of neutron-rich nuclei around ^{48}Ca with deep-inelastic collision*

D. Montanari, Univ. and INFN-Padova, Italy

16:40 – 17:25 **Coffee Break**

Chair: D. Baye

17:25 – 17:50 *Dynamical effects in proton break-up from exotic nuclei*

R. Kumar, Univ. and INFN-Pisa

17:50 – 18:15 *High-energy break-up of 6Li as a tool to study the Big-Bang nucleosynthesis reaction $D(\alpha,\gamma)^6Li$*

S. Typel, GSI and TUM, Germany

18:15 – 18:40 *The EMMA recoil mass spectrometer*

O. Kirsebom, TRIUMF, Canada

18:40 – 19:05 *Search for heavy and superheavy systems in $^{197}\text{Au} + ^{232}\text{Th}$ collisions near the Coulomb barrier*

A.Bonasera, INFN - LNS, Italy

19:30 **Bus to Catania downtown**

21:00 **Social Dinner**

Thursday December 16

Chair: A. Bonaccorso

09:00 – 09:30 *Nuclear rainbow structures in the system $^{16}\text{O} + ^{27}\text{Al}$*

D. Pereira, IFUSP, Brazil

09:30 – 10:00 *One-nucleon removal reactions as a spectroscopic tool for exotic nuclei*

F. Carstoiu, IFIN-HH, Romania

10:00 – 10:30 *From exotic to stable nuclei*

N. Alamanos, CEA/Saclay, France

10:30 – 11:15 **Coffee Break**

Chair: F. Cappuzzello

11:15 – 11:40 *Alpha cluster states in odd light nuclei populated via the $(^6\text{Li},d)$ reaction*

T. Borello-Lewin, IFUSP, Brazil

11:40 – 12:05 *The R3B-GLAD magnet: a large aperture superconducting dipole magnet for experiments with relativistic radioactive beams at the GSI & FAIR facilities*

J.E. Ducret, CEA/Saclay, IRFU, France

12:05 – 12:30 *HELIOS: a new approach to study transfer reactions in inverse kinematics*

B.Kay, Univ. York, Great Britain

12:30 – 12:55 *RIB production and reaction dynamics studies with the facility EXOTIC at LNL*

M. Mazzocco, Univ. and INFN-Padova, Italy

12:55 – 13:10 *Conclusions*

A.Cunsolo, INFN-LNS, Italy

13:10 *Lunch*