

The 6th European Summer School on Experimental Nuclear Astrophysics

St. Tecla (Catania), 18-27/09/2011

Sunday, 18/09/2011

08:00-18:00 Arrivals
18:30-20:30 Welcome cocktail
20:30-22:00 Dinner

Monday, 19/09/2011

08:00-09:00 Breakfast
09:00-10:10 Welcome from authorities
10:10-10:55 R. Cyburt "Introduction to nuclear Astrophysics I"
11:00-11:15 Break
11:15-12:00 R. Cyburt "Introduction to nuclear Astrophysics II"
12:05-12:50 O. Straniero "Introduction to Stellar Evolution I"
13:00-13:45 O. Straniero "Introduction to Stellar Evolution II"
13:45-14:30 Lunch
16:30-17:20 R. Gallino "Introduction to the s-process"
17:20-17:40 Coffee Break
17:40-18:30 K.L. Kratz "Introduction to the r-process"
18:30-19:20 Contributions from young researchers
 V. Foteinou "Proton capture reaction cross sections for the p process" (15'+2')
 G. Provatas "Cross-section measurements of alpha capture reactions relevant to p-process nucleosynthesis" (15'+2')
 G. Ivashchenko "Properties of intrinsic quasar spectra within the HI Ly-alpha forest region" (15'+2')
20:00-22:00 Dinner

Tuesday, 20/09/2011

08:00-09:00 Breakfast
09:00-09:50 J. Josè "General Theory on Novae I"
10:00-10:50 J. Josè "General Theory on Novae II"
10:50-11:20 Break
11:20-12:10 G. Rogachev "Detectors for experimental nuclear astrophysics I"
12:20-13:10 G. Rogachev "Detectors for experimental nuclear astrophysics II"
13:10-14:30 Lunch
16:30-17:20 M. Limongi " $^{12}\text{C}+^{12}\text{C}$ reaction and astrophysical implications"
17:20-17:40 Coffee Break
17:40-18:30 P. Schillebeeckx "TOF experiments to support nuclear astrophysics"
18:30-19:40 Contributions from young researchers
 C. Lederer "Neutron capture cross section of the s process branch point nucleus ^{63}Ni at n_TOF/CERN" (15'+2')
 R. Kshetri "High energy response of TIGRESS detectors" (15'+2')

A. Nasr “Space charge effect in the Multi-ionization chamber response signal” (15’+2’)

C. Weiss “A CVD diamond detector for (n, α) cross section measurements” (15’+2’)

20:00-22:00 Dinner

Wednesday, 21/09/2011

08:00-09:00 Breakfast

09:00-09:50 T. Kajino “Big Bang Models I”

10:00-10:50 T. Kajino “Big Bang Models II”

10:50-11:20 Break

11:20-12:10 A. Coc “Primordial Nucleosynthesis: theory vs observations I”

12:20-13:10 A. Coc “Primordial Nucleosynthesis: theory vs observations II”

13:10-14:30 Lunch

15:40-16:30 M. El Eid “Heavy-ion element synthesis and cosmology”

16:30-17:20 W.R. Hix “Core-collapse Supernovae”

17:20-17:40 Coffee Break

17:40-18:30 S. Wanajo “Core-collapse supernovae (and neutron star mergers) as the origin of elements beyond iron”

18:30-19:20 Contributions from young researchers

J. Suzuki “Cosmic History of Core-Collapse Supernovae and Supernova Relic Neutrinos” (15’+2’)

J. Gajevic “Electron screening in Al and Ni metals” (15’+2’)

M. Kaczmarek “New Experimental Results for the Enhanced Electron Screening in the Deuteron Fusion Reactions under UHV Conditions” (15’+2’)

20:00-22:00 Dinner

Thursday, 22/09/2011

08:00-09:00 Breakfast

09:00-09:50 C. Bertulani “Theory of the Coulomb Dissociation I”

10:00-10:50 C. Bertulani “Theory of the Coulomb Dissociation II”

10:50-11:20 Break

11:20-12:10 A. Szanto de Toledo “Experimental studies for nuclear astrophysics”

12:10-13:20 Contributions from young researchers

D. Santiago “Triple configuration coexistence in ^{44}S ” (15’+2’)

M. Avila “Alpha-clustering in ^{18}O ” (15’+2’)

A. Kuchera “Molecular structures in isobaric analog states of ^{10}B ” (15’+2’)

H. David “A new technique for studies of highly proton rich nuclei in the region of the astrophysical rp-process” (15’+2’)

13:20-14:30 Lunch

15:40-16:30 O. Sorlin “Nuclear forces and shell evolution towards drip line”

16:30-17:20 L. Trache “The ANC method in nuclear astrophysics”

17:20-17:40 Coffee Break

17:40-18:30 Y. Fujita “Weak interaction in nuclear astrophysics”

18:30-19:20 G. Imbriani “Standard Solar Model data needs”
20:00-22:00 Dinner

Friday, 23/09/2011

08:00-09:00 Breakfast
09:00-09:50 L. Trache “Decay spectroscopic for nuclear astrophysics”
10:00-10:50 F. Hammache “Transfer reactions as a tool for nuclear astrophysics”
10:50-11:20 Break
11:20-12:10 T. Motobayashi “Recent results from CD experiments”
12:20-13:10 S. Kubono “Recent results on explosive nucleosynthesis with low-energy RI-beams”
13:10-14:30 Lunch
15:40-16:30 M. Gounelle “Short-lived radionuclides”
16:30-17:20 C. Spitaleri “The Trojan Horse Method: a how-to approach”
17:20-17:40 Coffee Break
17:40-18:30 C. Spitaleri “The Trojan Horse Method: a how-to approach”
18:30-19:40 Contributions from young researchers
 Simmons “The Beta Delayed Proton and Gamma Decay of ^{27}P For Nuclear Astrophysics” (15'+2')
 A. Spiridon “A new detection system for very low-energy protons from β -delayed proton decay” (15'+2')
 I. Indelicato “Study of the $^{19}\text{F}(\text{p},\alpha)^{16}\text{O}$ reaction” (15'+2')
 G.L. Guardo “Study of the $^{17}\text{O}(\text{n},\alpha)^{14}\text{C}$ reaction: extension of the Trojan Horse Method to neutron induced reactions” (15'+2')
20:00-22:00 Dinner

Saturday, 24/09/2011

08:00-09:00 Breakfast
09:00-09:50 M. Busso “Introduction to the s-proces I”
10:00-10:50 M. Busso “Introduction to the s-proces II”
10:50-11:20 Break
11:20-12:10 R. Diehl “Astronomy with cosmic nuclei”
12:20-13:10 S. Bishop “Recent results on novae nucleosynthesis”
13:10-14:30 Lunch
15:40-16:30 P.J. Woods “Experiments in explosive nuclear astrophysics”
16:30-17:20 Contributions from young researchers
 D. Schuermann “Study of the 6.05 MeV cascade transition in $^{12}\text{C}(\alpha,\gamma)^{16}\text{O}$ ” (15'+2')
 L. Lamia “Recent results on the $^{11}\text{B}(\text{p},\alpha)^8\text{Be}$ reaction studied through the THM: S(E)-factor and electron screening measurements.” (15'+2')
 M. La Cognata “Modified r-matrix analysis of the $^{19}\text{F}(\text{p},\alpha)^{16}\text{O}$ HOES reaction” (15'+2')
17:20-17:40 Coffee Break

17:40-18:30 Contributions from young researchers

D. Scott “Underground Measurement of the $^{17}\text{O}(\text{p},\gamma)^{18}\text{F}$ Reaction” (15'+2')

D. Mountford “Resonances in ^{19}Ne with relevance to the astrophysically important $^{18}\text{F}(\text{p},\alpha)^{15}\text{O}$ reaction” (15'+2')

D. Doherty “ γ - spectroscopic study of key resonances in ^{31}S for the $^{30}\text{P}(\text{p},\gamma)^{31}\text{S}$ reaction in ONe novae” (15'+2')

18:30-19:20 Contributions from young researchers

G. Mahmoud “Study of the Thermal Pulsation of AGB Stars” (15'+2')

M.K. Pradhan “Influence of projectile breakup on fusion with ^{159}Tb target” (15'+2')

M. Norrby “Alpha-particle Resonances and Alpha-clusters in Medium Light Nuclei” (15'+2')

20:00-22:00 Dinner

Sunday, 25/09/2011

08:00-09:00 Breakfast

09:15-18:30 Social Trip

20:00-22:00 Dinner

Monday, 26/09/2011

08:00-09:00 Breakfast

09:00-09:40 K.H. Langanke “Core collapse Supernovae”

09:40-10:20 M. Aliotta “Underground laboratories”

10:20-10:40 Break

10:40-11:20 A. Guglielmetti “Nuclear astrophysics at LUNA: recent results”

11:20-12:00 L. Gialanella “Nuclear astrophysics with recoil separators”

12:00-12:40 Z. Fulop “General Introduction to the p-process”

12:40-13:20 S. Harissopulos “Nuclear physics aspects of p-process nucleosynthesis: an experimentalist's (over)view”

13:30-14:30 Lunch

15:30-16:10 S. Cherubini “Measurements of the $^8\text{Li}(\alpha,\text{n})^{11}\text{B}$ reaction and astrophysical implications”

16:10-16:50 R.G. Pizzone “Trojan Horse Method and its role in the electron screening effect investigation”

16:50-17:10 Coffee Break

17:10-17:50 C. Rolfs “Concluding remarks”

20:30-22:00 Dinner

Tuesday, 27/09/2011

Departures