

## **Session Program**

**21-26 Jun 2015**



## **Nucleus Nucleus 2015**

### ***Nuclear Astrophysics***

Dipartimento di Fisica ed Astronomia, Università di Catania, Aula Magna  
Via Santa Sofia, 64 95123, Catania, Italy

# Tuesday 23 June

17:00

## Nuclear Astrophysics

**Session** | **Location:** INFN-Laboratori Nazionali del Sud, INFN-LNS, Aula 52 | **Convener:** Carlos Bertulani

17:00–17:25

### Reactions on neutron-deficient nuclei for nuclear astrophysics

#### Speaker

Jeffrey Blackmon

17:25–17:50

### The $^{12}\text{C}(^{12}\text{C},\alpha)^{20}\text{Ne}$ and $^{12}\text{C}(^{12}\text{C},p)^{23}\text{N}$ reactions at the Gamow peak via the Trojan Horse Method

#### Speaker

Dr Aurora Tumino

17:50–18:10

### Asymptotic Normalisation Coefficients from the $^{26}\text{Al}(d,p)^{27}\text{Al}$ reaction, mirror nuclei study and application to nuclear astrophysics

#### Speaker

Mr Vincent Margerin

18:10–18:30

### AGB star nucleosynthesis: when new data from nuclear physics help to solve puzzles

#### Speaker

Dr Sara Palmerini

18:30–18:50

### Neutron Star Structure from the Quark-Model Baryon-Baryon Interaction

#### Speaker

Dr Kenji Fukukawa

18:50–19:10

### Electron screening in laboratory experiments-an unresolved effect

#### Speaker

Dr Jelena Vesic

19:10

# Thursday 25 June

14:30

## Nuclear Astrophysics

**Session** | **Location:** Dipartimento di Fisica ed Astronomia, Università di Catania, Aula Magna | **Convener:** Zsolt Fulop

14:30–14:55

### Indirect techniques for astrophysical reaction rates determinations

#### Speaker

Dr Fairouz Hammache

14:55–15:20

### Studying astrophysical reactions with low-energy RI beams at CRIB

#### Speaker

Dr Hidetoshi Yamaguchi

15:20–15:45

### LUNA: present status and future prospects

#### Speaker

Antonio Caciolli

15:45–16:05

### Fusion measurements of $^{12}\text{C}+^{12}\text{C}$ at energies of astrophysical interest

#### Speaker

Daniel Santiago-Gonzalez

16:05–16:25

### Nuclear magics at explosive magnetization

#### Speaker

Prof. Vladimir Kondratyev

16:25–16:45

### The Trojan Horse Method as a tool for investigating astrophysically relevant fusion reactions

#### Speaker

Livio Lamia

16:45

17:00

## Nuclear Astrophysics

**Session** | **Location:** Dipartimento di Fisica ed Astronomia, Università di Catania, Aula Magna | **Convener:** Silvio Cherubini

17:00–17:25

### Recent results of the nTOF facility

#### Speaker

Giuseppe Tagliente

17:25–17:50

### Constraining the key $\alpha$ -capture astrophysical reaction rates using the sub-Coulomb $\alpha$ -transfer reactions

#### Speaker

Dr Grigory Rogachev

17:50–18:10

### Insight into the $^{24}\text{Mg}$ excited states located in Gamow window for carbon - carbon burning

**Speaker**

Dr Neven Soic

18:10–18:30

**Primordial nucleosynthesis revised: the THM contribution****Speaker**

Rosario Pizzone

18:30–18:50

**New measurement of the  $^{10}\text{B}(p,\alpha)^7\text{Be}$  reaction cross section at low energies and the structure of  $^{11}\text{C}$** **Speaker**

Dr Ivano Lombardo

18:50

## Friday 26 June

08:30

### Nuclear Astrophysics

**Session** | **Location:** , Dipartimento di Fisica ed Astronomia, Università di Catania, Aula Magna | **Convener:** Michael Wiescher

08:30–09:00

#### Reaction models in nuclear astrophysics

**Speaker**

Dr Pierre Descouvemont

09:00–09:30

#### Indirect methods in nuclear astrophysics

**Speaker**

Prof. Akram Mukhamedzhanov

09:30–10:00

#### Where is the site of the r-process?

**Speaker**

Ani Aprahamian

10:00–10:30

#### Nuclear Reaction studies for Explosive Nuclear Astrophysics

**Speaker**

Prof. Philip Woods

10:30