#### 19th Russbach School on Nuclear Astrophysics



#### **Report of Contributions**

Contribution ID: 1 Type: **not specified** 

#### Nuclear astrophysics: an introduction - part 1 and 2

Presenter: ALIOTTA, Marialuisa

Contribution ID: 2 Type: not specified

#### Advanced techniques and indirect methods

**Presenter:** GUARDO, Giovanni Luca

Contribution ID: 3 Type: not specified

### The 19F(p,α) reaction studied via trojan horse method

**Presenter:** VUKMAN, Nikola

Contribution ID: 4 Type: **not specified** 

#### Nuclear astrophysics: an introduction - part 1 and 2

Presenter: ALIOTTA, Marialuisa

Contribution ID: 5 Type: **not specified** 

### Constraining electron capture rates with (d,2He) in inverse kinematics

Presenter: RAHMAN, Zarif

Contribution ID: 6 Type: **not specified** 

### Historical developments and moments in nuclear astrophysics

Presenter: WIESCHER, Michael

Contribution ID: 7 Type: **not specified** 

#### Neutron cross section measurements of astrophysical interest at n\_TOF

**Presenter:** LERENDEGUI-MARCO, Jorge

Contribution ID: 8 Type: not specified

#### Direct and indirect measurements of $22Ne(\alpha, \gamma)26Mg$

Presenter: MERCOGLIANO, Daniela

Contribution ID: 9 Type: not specified

#### Stellar modelling: an introduction

Presenter: VESCOVI, Diego

Contribution ID: 10 Type: not specified

### Core-collapse supernovae: explosion dynamics, multi-messenger emission, explosive nucleosynthesis

Presenter: BUGLI, Matteo

Contribution ID: 11 Type: not specified

# High resolution simulations of the interaction between nova/supernova ejecta and the nearby accretion disk

**Presenter:** SANZ, Axel

Contribution ID: 12 Type: not specified

### Constraints on nucleosynthesis from chemical abundances of metal-poor stars

**Presenter:** HOPPE, Richard

Contribution ID: 13 Type: not specified

### Inspecting the mass-loss and dust production of evolved stars

Presenter: TOSI, Silvia

Contribution ID: 14 Type: **not specified** 

#### Nucleosynthesis in 3D stellar evolution models

**Presenter:** RIZZUTI, Frederico

Contribution ID: 15 Type: not specified

#### Isotopic anomalies in meteorites: an introduction

**Presenter:** BURKHARDT, Christoph

Contribution ID: 16 Type: not specified

### Nuclear burning recorded in meteorites as a tracer of the birth of the solar system

Maria Lugaro

Presenter: LUGARO, Maria

Contribution ID: 17 Type: not specified

#### p process and presolar grains

**Presenter:** ONG, Wei Jia

Contribution ID: 18 Type: not specified

### Tracing solar system evolution with isotopic anomalies in meteorites

**Presenter:** BURKHARDT, Christoph

Contribution ID: 19 Type: not specified

## Nuclear reaction theory for astrophysics and other applications

Presenter: ESCHER, Jutta

Contribution ID: 20 Type: not specified

### Nuclear properties at finite temperatures in energy density functional theory

**Presenter:** PAAR, Nils

Contribution ID: 21 Type: not specified

# y strength functions for (n,y) reactions based on relativistic density-dependent point coupling interaction

**Presenter:** KÜÇÜKSUCU, Sema

Contribution ID: 22 Type: not specified

#### Cooling of rapidly rotating neutron stars in 2D

**Presenter:** BEZNOGOV, Mikhail

Contribution ID: 23 Type: not specified

### Photo strength functions for astrophysical applications

**Presenter:** LE NOAN, Oscar

Contribution ID: 24 Type: not specified

#### Fast emulation of neutron star properties

**Presenter:** REED, Brendan

Contribution ID: 25 Type: not specified

#### **R-process Introduction**

**Presenter:** Mr GIULIANI, Samuel

Contribution ID: 26 Type: not specified

### The r-process alliance: mapping the r-process with stellar abundances

**Presenter:** Ms RACCA, Mila

Contribution ID: 27 Type: not specified

#### Fission, superheavy elements, and the r-process

**Presenter:** Ms APRAHAMIAN, Ani

Contribution ID: 28 Type: not specified

# A practical approach to nuclear astrophysics: activation method studies on 86 $Kr(\alpha,n)$ and its connection to weak r-process

**Presenter:** Mr KOVÁCS, Sándor

Contribution ID: 29 Type: not specified

## Neutron capture reaction of r- process in common envelop jet supernova

**Presenter:** Mr JIN, Shilun

Contribution ID: 30 Type: not specified

### Barium stars for constraining aysymptotic giant branch nucleosynthesis

**Presenter:** Ms VILÁGOS, Blanka

Stellar spectroscopy: an introduction

Contribution ID: 31 Type: not specified

#### Stellar spectroscopy: an introduction

**Presenter:** Mr MATSUNO, Tadafumi

Contribution ID: 32 Type: not specified

### Elusive nature of post asymptotic giant branch chemical distributions

**Presenter:** Ms KAMATH, Devika

Contribution ID: 33 Type: not specified

## Thermonuclear supernovae: an observer's perspective

**Presenter:** Mr PATAT, Ferdinando

Contribution ID: 34 Type: not specified

### The supernova link between the local bubble and deep sea radioisotopes

**Presenter:** Mr SCHULREICH, Michael

Contribution ID: 35 Type: not specified

## Entering in the new era of multimessenger astrophysics: what we have learned up to now?

**Presenter:** Ms CUTINI, Sara

Contribution ID: 36 Type: not specified

## From stellar spectroscopy to galactic chemical evolution

**Presenter:** Mr MATSUNO, Tadafumi

Contribution ID: 37 Type: not specified

### Atomic recipes for astronomical transients

**Presenter:** Mr CRISTALLO, Sergio

Contribution ID: 38 Type: not specified

#### **Neutron sources in stars**

**Presenter:** Mr WIESCHER, Michael

Contribution ID: 39 Type: not specified

## $(\alpha,n)$ and $(\alpha,\gamma)$ key reaction studies using alpha-transfer reactions

**Presenter:** Ms HAMMACHE, Faïrouz

Contribution ID: 40 Type: not specified

# Study of ion-ion fusion reactions at sub-barrier energies for nuclear astrophysics

**Presenter:** Ms SPIRIDON, Alexandra

Contribution ID: 41

Type: not specified

### A new neutron detection array for cross section measurements at IFIN-HH

**Presenter:** Mr FILIPESCU, Dan

Contribution ID: 42 Type: not specified

### Exploring calcium discrepancies in nova models

**Presenter:** Ms LORIA, Mallory

Contribution ID: 43 Type: not specified

### Results of total cross-section measurements of the 87Rb(p,y) 88Sr reaction

Presenter: Ms WILDEN, Svenja

Contribution ID: 44

Type: not specified

## Electron screening: answer to an old problem from new perspective

Presenter: Ms CVETINOVIĆ, Aleksandra

Contribution ID: 45 Type: not specified

### Electron screening in low energy reactions

**Presenter:** Mr LIPOGLAVSEK, Matej

Contribution ID: 46 Type: not specified

### **Nuclear astrophysics at FRIB**

**Presenter:** Mr SCHATZ, Hendrik

Contribution ID: 47 Type: **not specified** 

### An update on the commissioning of SECAR

**Presenter:** Ms SMITH, Mackenzie

Contribution ID: 48 Type: **not specified** 

### Total absorption spectroscopy of an astromer in 70Cu

**Presenter:** Ms RONNING, Eleanor