

GIANTS XI

Report of Contributions

Contribution ID: 1

Type: **not specified**

Contribution 2

Contribution ID: 2

Type: **not specified**

Opening Talk

Thursday, 20 October 2022 09:30 (20 minutes)

Presenter: PISANTI, Ofelia (University of Naples Federico II)

Session Classification: Big Bang and Galactic Chemical Evolution - chair M. Busso

Contribution ID: 3

Type: **not specified**

Recent results on BBN reactions studied via THM (ASFIN)

Thursday, 20 October 2022 09:50 (20 minutes)

Presenter: RAPISARDA, Giuseppe Gabriele (Istituto Nazionale di Fisica Nucleare)

Session Classification: Big Bang and Galactic Chemical Evolution - chair M. Busso

Contribution ID: 4

Type: **not specified**

Neutron capture processes in the Early Galaxy (n_TOF)

Thursday, 20 October 2022 10:10 (20 minutes)

Presenter: CESCUTTI, Gabriele (Istituto Nazionale di Fisica Nucleare)

Session Classification: Big Bang and Galactic Chemical Evolution - chair M. Busso

Contribution ID: 5

Type: **not specified**

Measurements on deuterium burning at LUNA and its implications in astrophysics and nuclear physics

Thursday, 20 October 2022 10:30 (20 minutes)

Presenter: FERRARO, Federico (Istituto Nazionale di Fisica Nucleare)

Session Classification: Big Bang and Galactic Chemical Evolution - chair M. Busso

Contribution ID: 6

Type: **not specified**

Opening talk

Thursday, 20 October 2022 11:20 (20 minutes)

Presenter: STRANIERO, Oscar (Istituto Nazionale di Fisica Nucleare)

Session Classification: Stellar Evolution I: H-Burning - chair S. Romano

Contribution ID: 7

Type: **not specified**

ANC experiments for nuclear astrophysics: the ${}^3\text{He}(\alpha, n){}^7\text{Be}$ and ${}^{26}\text{Al}(n, p){}^{26}\text{Mg}$ cases (ASFIN)

Thursday, 20 October 2022 11:40 (20 minutes)

Presenter: D'AGATA, Giuseppe Ferdinando (Università degli Studi di Catania - Dipartimento di Fisica e Astronomia "Ettore Majorana" & Laboratori Nazionali del Sud - LNS INFN)

Session Classification: Stellar Evolution I: H-Burning - chair S. Romano

Contribution ID: 8

Type: **not specified**

Measurement of the ${}^7\text{Be}(p, \gamma){}^8\text{B}$ reaction cross section at astrophysical energies with the recoil mass separator ERNA

Thursday, 20 October 2022 12:00 (20 minutes)

Presenter: DI LEVA, Antonino (Istituto Nazionale di Fisica Nucleare)

Session Classification: Stellar Evolution I: H-Burning - chair S. Romano

Contribution ID: 9

Type: **not specified**

Nuclear reactions of astrophysical interest with solid targets at LUNA

Thursday, 20 October 2022 12:20 (20 minutes)

Presenter: SKOWRONSKI, Jakub (Istituto Nazionale di Fisica Nucleare)

Session Classification: Stellar Evolution I: H-Burning - chair S. Romano

Contribution ID: 10

Type: **not specified**

Nuclear reactions on Ne isotopes at LUNA

Thursday, 20 October 2022 12:40 (20 minutes)

Presenter: MASHA, Eliana

Session Classification: Stellar Evolution I: H-Burning - chair S. Romano

Contribution ID: 11

Type: **not specified**

Opening talk

Thursday, 20 October 2022 14:00 (20 minutes)

Presenter: CHIEFFI, Alessandro (Istituto Nazionale di Fisica Nucleare)

Session Classification: Stellar Evolution II: Advanced Stages - chair F. Terrasi

Contribution ID: 12

Type: **not specified**

The $^{12}\text{C} + ^{16}\text{O}$ fusion reaction in carbon burning: study at energies of astrophysical interest using the Trojan Horse Method (ASFIN)

Thursday, 20 October 2022 14:20 (20 minutes)

Presenter: OLIVA, Alessandro Alberto (DFA-UniCT, INFN-LNS)

Session Classification: Stellar Evolution II: Advanced Stages - chair F. Terrasi

Contribution ID: 13

Type: **not specified**

12C+12C with LUNAMV

Thursday, 20 October 2022 14:40 (20 minutes)

Presenter: RAPAGNANI, David (Istituto Nazionale di Fisica Nucleare)

Session Classification: Stellar Evolution II: Advanced Stages - chair F. Terrasi

Contribution ID: 14

Type: **not specified**

Direct measurements of the $^{12}\text{C}+^{12}\text{C}$ reactions cross-sections towards astrophysical energies (ERNA)

Thursday, 20 October 2022 15:00 (20 minutes)

Presenter: MORALES-GALLEGOS, Lizeth (Istituto Nazionale di Fisica Nucleare)

Session Classification: Stellar Evolution II: Advanced Stages - chair F. Terrasi

Contribution ID: 15

Type: **not specified**

$^{12}\text{C}(\alpha, \gamma)^{16}\text{O}$ measurement via inverse kinematic: the ERNA separator commissioning

Thursday, 20 October 2022 15:20 (20 minutes)

Presenter: SANTONASTASO, Claudio (Istituto Nazionale di Fisica Nucleare)

Session Classification: Stellar Evolution II: Advanced Stages - chair F. Terrasi

Contribution ID: 16

Type: **not specified**

Opening talk

Thursday, 20 October 2022 16:10 (20 minutes)

Presenter: CRISTALLO, Sergio (Istituto Nazionale di Fisica Nucleare)

Session Classification: Nucleosynthesis Beyond the Iron Peak - chair C. Massimi

Contribution ID: 17

Type: **not specified**

The $^{13}\text{C}(\text{a},\text{n})^{16}\text{O}$ cross section measurement at LUNA

Thursday, 20 October 2022 16:30 (20 minutes)

Presenter: CIANI, Giovanni Francesco (Istituto Nazionale di Fisica Nucleare)

Session Classification: Nucleosynthesis Beyond the Iron Peak - chair C. Massimi

Contribution ID: 18

Type: **not specified**

Status of the SHADES neutron detection array for $^{22}\text{Ne}(\alpha, n)^{25}\text{Mg}$ LUNA

Thursday, 20 October 2022 16:50 (20 minutes)

Presenter: ANANNA, Chemseddine (Istituto Nazionale di Fisica Nucleare)

Session Classification: Nucleosynthesis Beyond the Iron Peak - chair C. Massimi

Contribution ID: 19

Type: **not specified**

Neutron capture and total cross-section measurements on $^{94,95,96}\text{Mo}$ at n_TOF and GELINA

Thursday, 20 October 2022 17:10 (20 minutes)

Presenter: MUCCIOLA, Riccardo (Istituto Nazionale di Fisica Nucleare)

Session Classification: Nucleosynthesis Beyond the Iron Peak - chair C. Massimi

Contribution ID: 20

Type: **not specified**

Measurement of the Gd-160 neutron capture cross section at n_TOF

Thursday, 20 October 2022 17:30 (20 minutes)

Presenter: MASTROMARCO, Mario (UniBa-Dipartimento Interateneo di Fisica "M. Merlin", INFN Bari)

Session Classification: Nucleosynthesis Beyond the Iron Peak - chair C. Massimi

Contribution ID: 21

Type: **not specified**

A 7-Beryllium electron capture study for nuclear and solid state physics (ASBeST) (ERNA)

Friday, 21 October 2022 09:00 (20 minutes)

Presenter: GIALANELLA, Lucio (Istituto Nazionale di Fisica Nucleare)

Session Classification: Outlook, Upgrades and New Facilities - chair G. Imbriani

Contribution ID: 22

Type: **not specified**

Developing system arrays for new experimental approach in nuclear astrophysics (ASFIN)

Friday, 21 October 2022 09:20 (20 minutes)

Presenter: GUARDO, Giovanni Luca (Istituto Nazionale di Fisica Nucleare)

Session Classification: Outlook, Upgrades and New Facilities - chair G. Imbriani

Contribution ID: 23

Type: **not specified**

Aluminum nucleosynthesis: present and future measurement (ASFIN)

Friday, 21 October 2022 09:40 (20 minutes)

Presenter: PALMERINI, Sara (Istituto Nazionale di Fisica Nucleare)

Session Classification: Outlook, Upgrades and New Facilities - chair G. Imbriani

Contribution ID: 24

Type: **not specified**

The PANDORA Project for nuclear and astrophysical studies in laboratory plasmas: status and perspective

Friday, 21 October 2022 10:00 (20 minutes)

Presenter: MASCALI, David (LNS)

Session Classification: Outlook, Upgrades and New Facilities - chair G. Imbriani

Contribution ID: 25

Type: **not specified**

The PANDORA multi-diagnostics system for magnetoplasmas devoted to Nuclear Astrophysics Research

Friday, 21 October 2022 10:50 (20 minutes)

Presenter: NASELLI, Eugenia (Istituto Nazionale di Fisica Nucleare)

Session Classification: Outlook, Upgrades and New Facilities - chair G. Imbriani

Contribution ID: 26

Type: **not specified**

Calculating In-Plasma Nuclear β -Decay Rates for PANDORA

Friday, 21 October 2022 11:10 (20 minutes)

Presenter: MISHRA, Bharat (Istituto Nazionale di Fisica Nucleare)

Session Classification: Outlook, Upgrades and New Facilities - chair G. Imbriani

Contribution ID: 27

Type: **not specified**

Towards the $^{14}\text{N}(p,g)^{15}\text{O}$ reaction measurement at LUNA-MV

Friday, 21 October 2022 11:30 (20 minutes)

Presenter: COMPAGNUCCI, Alessandro (Istituto Nazionale di Fisica Nucleare)

Session Classification: Outlook, Upgrades and New Facilities - chair G. Imbriani

Contribution ID: 28

Type: **not specified**

Round Table Topics

Friday, 21 October 2022 14:00 (2 hours)

- astrofisica nucleare nella commissione III (invito a Nania, Bettoni per discussione)
- ChETEC e EURO-LABS e altri networks o progetti europei e come sfruttarli al meglio
- mid term plan feedback
- nuove proposte per il gruppo:
- interfaccia con altre comunita' SPES, neutrini (invito a Daniele Mengoni, De Angelis...)
- female in NA
- newsletter -mailing list

Session Classification: Round Table

Contribution ID: 29

Type: **not specified**

Measurement of the neutron capture cross section on Ni-64 at CERN n_TOF

Thursday, 20 October 2022 17:50 (20 minutes)

Presenter: SPELTA, Michele

Session Classification: Nucleosynthesis Beyond the Iron Peak - chair C. Massimi