

## **Session Program**

**Jun 19 - 24, 2022**



# **The 13th Torino Workshop on AGB stars & the 3rd Perugia Workshop on Nuclear Astrophysics**

## ***Nuclear Astrophysics***

# Mon, June 20

9:50 AM

## Nuclear Astrophysics

Session | Location: Perugia, Italy | Convener: Sergio CRISTALLO

9:50 - 10:15 AM **The neutron time-of-flight facility n\_TOF at CERN**

**Speaker**

Alberto MENGONI

10:15 - 10:40 AM

**Neutron capture and total cross measurements on  $^{94,95,96}\text{Mo}$  at n\_TOF and GELINA**

**Speaker**

Riccardo MUCCIOLA

10:40 AM

11:10 AM

## Nuclear Astrophysics

Session | Location: Perugia, Italy | Convener: Sergio CRISTALLO

11:10 - 11:35 AM

**Experimental  $kT=28$  keV Maxwell-Boltzmann-like neutron spectrum for Maxwellian averaged cross section measurement (R)**

**Speaker**

Elizabeth MUSACCHIO GONZALEZ

11:35 AM - 12:00 PM **Measurement of the  $^{140}\text{Ce}(n,\gamma)$  cross section at n\_TOF**

**Speaker**

Simone AMADUCCI

12:00 - 12:25 PM

**Neutron capture reactions in the stellar weak and main s-process regimes: AGa, ASe, AKr and ACe targets (R)**

**Speaker**

Moshe TESSLER

12:25 - 12:50 PM **Measurements of s process neutron source cross sections**

**Speaker**

Andreas BEST

12:50 PM

2:30 PM

## Nuclear Astrophysics

Session | Location: Perugia, Italy

2:30 - 2:55 PM **The influence of electronic and nuclear correlation on weak decays**

**Speaker**

Simone TAIOLI

2:55 - 3:20 PM

**Relativistic quantum theory and ab initio simulations of electroweak decay spectra in nuclei.**

**Speaker**  
 Francesca TRIGGIANI

3:20 - 3:45 PM

**Numerical virtual experiments for in-plasma nuclear beta-decay study in the framework of the PANDORA project**

**Speaker**  
 Angelo PIDATELLA

3:45 - 4:10 PM

**Modelling Ion Population Kinetics in ECR Plasmas to Extract Inputs for In-Plasma  $\beta$ -Decay Rates**

**Speaker**  
 Bharat MISHRA

4:10 PM

4:40 PM

**Nuclear Astrophysics**

**Session** | **Location:** Perugia, Italy

4:40 - 5:05 PM

**Recent achievements of the ERNA Collaboration**

**Speaker**  
 Lucio GIALANELLA

5:05 - 5:30 PM

**Indirect Investigation for AGB Stellar Nucleosynthesis (R)**

**Speaker**  
 Maria Letizia SERGI

5:30 - 5:55 PM

**The  $^{19}\text{F}(\alpha, p)^{22}\text{Ne}$  and  $^{23}\text{Na}(\alpha, p)^{20}\text{Ne}$  reactions at energies of astrophysical interest via the Trojan Horse Method**

**Speaker**  
 Giuseppe Ferdinando D'AGATA

5:55 - 6:20 PM

**The measurements of nuclear reaction cross-sections relevant to AGB stars at LUNA: the case of the  $^{17}\text{O}(p, \gamma)^{18}\text{F}$  reaction**

**Speaker**  
 Denise PIATTI

6:20 - 6:45 PM

**Study of the  $^{20}\text{Ne}(p, \gamma)^{21}\text{Na}$  reaction at LUNA**

**Speaker**  
 Lucia BARBIERI

6:45 PM