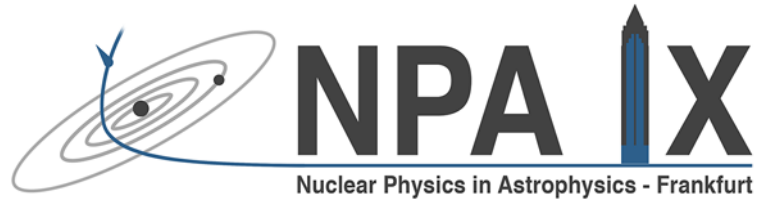


# Program



## Monday

09:00 – 09:15	OPENING	
09:15 – 09:45	Camilla Juul Hansen	Traces of the early Universe from metal-poor stars
09:45 – 10:00	Falk Herwig	A classification of CEMP stars based on neutron density that reveals the important role of the $i$ process and the need for better nuclear physics data
10:00 – 10:15	Sergio Cristallo	The CEMP star SDSS J02220313: the first evidence for proton ingestions in very low-metallicity AGB stars?
10:30 – 10:45	Antonio Caciolli	Study of the $^{22}\text{Ne}(p,\gamma)^{23}\text{Na}$ at LUNA
10:30 – 11:00	COFFEE	
11:00 – 11:30	Alberto Mengoni	Neutron capture and beta-decay rates under stellar conditions: theoretical approaches and perspectives for their experimental determination
11:30 – 11:45	Catalin Matei	First measurement of the $^7\text{Li}(\gamma,t)^4\text{He}$ cross section using mono-energetic $\gamma$ -ray beams
11:45 – 12:00	César Domingo Pardo	Review and new concepts for neutron-capture measurements of astrophysical interest
12:00 – 12:15	Adria Casanovas	New measurement of the neutron capture cross section of the thallium isotopes $^{203}\text{Tl}$ , $^{204}\text{Tl}$ and $^{205}\text{Tl}$
12:15 – 12:30	Kafa Al-Khasawneh	NICE - Neutron Induced Charged particle Emission
12:30 – 14:00	LUNCH	
14:00 – 14:30	Benoit Côté	The Origin of the Elements from Nuclear Physics to Galaxy-Scale Simulations
14:30 – 14:45	Hannah Yasin	Impact of the equation of state in core-collapse supernovae
14:45 – 15:00	Hannah Brinkman	Aluminium-26 from massive binary stars
15:00 – 15:15	Moritz Reichert	On the chemical enrichment of dwarf spheroidal galaxies
15:15 – 15:30	Daniel Bemmerer	First light from the Felsenkeller 5 MV underground accelerator
15:30 – 16:00	COFFEE	
16:00 – 16:30	György Gyürky	Stable beam experiments in wide energy ranges serving low energy nuclear astrophysics
16:30 – 16:45	Jan Glorius	Nuclear reaction studies on stored ions
16:45 – 17:00	Uwe Greife	Stable Ion Beam Experiments with the DRAGON Recoil Separator at TRIUMF
17:00 – 17:15	Athanasios Psaltis	The $^7\text{Be}(\alpha,\gamma)^{11}\text{C}$ with DRAGON for $vp$ -process nucleosynthesis
17:15 – 17:30	Samuel Ayet San Andrés	Mass measurements of neutron-rich Ga isotopes performed at TITAN and their impact on the nucleosynthesis of the first $r$ -process abundance peak
17:30 – 18:00	BREAK	
18:00 – 21:00	Poster 1	

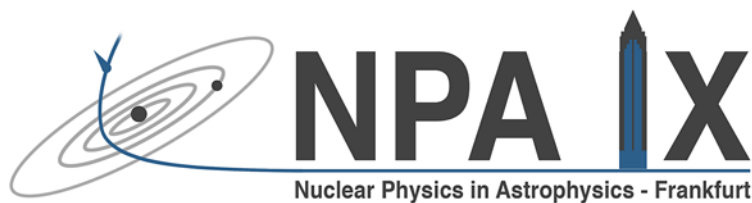
# Program



## Tuesday

09:00 – 09:30	Ann-Cecilie Larsen	Indirect, experimental constraints of (n,y) reaction rates for the i- and r-process
09:30 – 09:45	Giuseppe Cardella	On the $^{12}\text{C}$ Hoyle state gamma decay
09:45 – 10:00	Umberto Battino	Stellar Modelling for Nuclear Astrophysics: Constraining the Astrophysical Origin of the p-nuclei
10:00 – 10:15	Anna Simon	First results from HECTOR: High Efficiency TOtal absorption spectrometeR for p-process nucleosynthesis studies
10:15 – 10:30	Ruchi Garg	The $^{59}\text{Cu}(p,\alpha)^{56}\text{Ni}$ cross section and heavy element nucleosynthesis in core collapse supernovae
10:30 – 11:00	COFFEE	
11:00 – 11:30	Filomena Nunes	Theory advances in reactions relevant for astrophysics
11:30 – 11:45	Richard James deBoer	Global R-matrix analysis of the $^{11}\text{B}(\alpha,n)^{14}\text{N}$ reaction
11:45 – 12:00	Peter Mohr	Activation measurement of $\alpha$ -induced cross sections for $^{197}\text{Au}$
12:00 – 12:15	Kathrin Göbel	Coulomb dissociation of $^{16}\text{O}$ into $^4\text{He}$ and $^{12}\text{C}$
12:15 – 12:30	Meiko Volkmandt	Neutron Capture Cross Section of $^{10}\text{Be}$
12:30 – 14:00	LUNCH	
14:00 – 14:30	Ani Aprahamian	High Precision Mass Measurements of Nuclei and the Neutron Star Merger
14:30 – 14:45	Marius Eichler	Imprints of fission in r-process abundance patterns
14:45 – 15:15	Masaru Shibata	Merger of neutron-star binaries
15:15 – 15:30	Antonios Nathanail	On the lifetime of the remnant of GW170817, through the properties of the ejected mass
15:30 – 16:00	COFFEE	
16:00 – 16:30	Aurora Tumino	Indirect methods constraining nuclear capture - the Trojan Horse Method
16:30 – 16:45	Dag Strömberg	Forbidden $^{20}\text{Ne} \rightarrow ^{20}\text{F}$ electron capture in intermediate-mass stars
16:45 – 17:15	Bernhard Müller	Nucleosynthesis in Multi-Dimensional Core-Collapse Supernova Explosion Models
17:15 – 17:30	Martin Obergaulinger	Long-time simulations of core-collapse supernovae
17:30 – 18:00	BREAK	
18:00 – 21:00	Poster 2	

# Program



## Wednesday

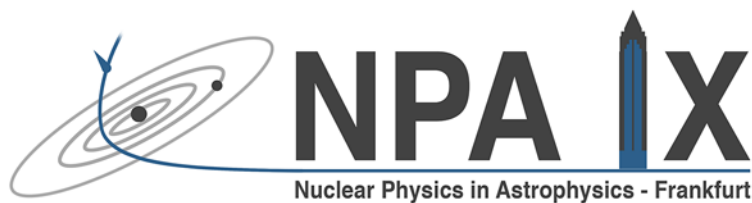
09:00 – 09:30	Maria Lugaro	Meteoritic Stardust Grains
09:30 – 09:45	Robert Andrassy	Convective-reactive processes in evolved massive stars
09:45 – 10:00	Sara Palmerini	Isotopic Abundances in Presolar SiC Grains accounted by s-Processing from MHD-induced Mixing in low mass AGB stars
10:00 – 10:15	Jacqueline den Hartogh	The s process production in rotating low-mass AGB stars
10:15 – 10:30	Tibor Norbert Szegedi	Study of the alpha-nucleus optical potentials used in the weak r-process nucleosynthesis models by the measurement of the $^{96}\text{Zr}(\alpha, n)^{99}\text{Mo}$ and $^{100}\text{Mo}(\alpha, n)^{103}\text{Ru}$ reaction cross sections
10:30 – 11:00	COFFEE	
11:00 – 11:30	Marco Pignatari	The slow neutron capture process in stars
11:30 – 11:45	Ashley Tattersall	NuGrid stellar data set: updated s-process nucleosynthesis
11:45 – 12:00	Marco La Cognata	$^{19}\text{F}$ spectroscopy and implications for astrophysics
12:00 – 12:15	Diego Vescovi	Modelling the formation of the $^{13}\text{C}$ neutron source in AGB stars
12:15 – 12:30	Giovanni Francesco Ciani	Cross section of the $^{13}\text{C}(\alpha, n)^{16}\text{O}$ reaction at low energies
12:30 – 14:00	LUNCH	
14:00 – 20:00	EXCURSION	
20:00 – 22:00	DINNER	

# Program

## Thursday

09:00 – 09:30	Masaomi Tanaka	Kilonova: Electromagnetic Signature of r-process Nucleosynthesis
09:30 – 09:45	Nobuya Nishimura	Observational signatures of magneto-rotational supernovae associated with r-process jets
09:45 – 10:00	Jorge Pereira	Nucleosynthesis of “light” heavy nuclei in neutrino-drive winds. Role of $(\alpha, n)$ reaction rates
10:00 – 10:15	Carolyn Doherty	Impact of rotation on heavy element production within stars on the low-mass/high-mass star divide
10:15 – 10:30	Johnson Liang	Spectroscopic Study of $^{39}\text{Ca}$ for Classical Nova Endpoint Nucleosynthesis
10:30 – 11:00	COFFEE	
11:00 – 11:30	Achim Schwenk	The nuclear chart and equation of state from nuclear forces
11:30 – 11:45	Friedrich Thielemann	r-Process Sites and their Imprint in Galactic Chemical Evolution
11:45 – 12:00	Friedrich K. Röpke	Electron-capture induced thermonuclear supernovae: explosion and nucleosynthesis
12:00 – 12:15	Kevin Macon	A new measurement of $^{17}\text{O}(\alpha, n)$ reaction
12:15 – 12:30	Axel Boeltzig	Cross Section Measurements of $^{23}\text{Na}(p, \gamma)^{24}\text{Mg}$
12:30 – 14:00	LUNCH	
14:00 – 14:30	Tsvi Piran	r-process nucleosynthesis and binary neutron star mergers
14:30 – 14:45	Dmitrii Nesterenko	Precision mass measurements of neutron-rich nuclei for the r-process
14:45 – 15:00	Xilu Wang	Sandblasting The R-process: Spallation Of R-process Nuclei Ejected From A NSNS Event
15:00 – 15:15	Stylianos Nikas	The creation of the first r-process peak elements, effects of beta decay rates and nuclear masses
15:15 – 15:30	Raphael Hirschi	Developing synergy between multi-dimensional and 1D simulations of stellar convection
15:30 – 16:00	COFFEE	
16:00 – 16:15	Andreas Best	Low energy cross section of $^{18}\text{O}(p, \gamma)^{19}\text{F}$
16:15 – 16:30	Philipp Scholz	Measurement of radiative $\alpha$ -capture cross sections on $^{98}\text{Ru}$ and $^{144}\text{Sm}$ for $\gamma$ -process nucleosynthesis
16:30 – 16:45	Chris Griffin	Studies of $\beta$ -delayed neutron emission in neutron-rich r-process nuclei with the BRIKEN detector array
16:45 – 17:00	Ana Henriques	Indirect measurements of neutron-induced cross sections at storage rings
17:00 – 17:15	Louis Wagner	First direct measurement of $^{56}\text{Ni}(\alpha, p)^{59}\text{Cu}$ to constrain X-Ray burst models
17:15 – 17:30	Alison Laird	Measurement of $^{20}\text{Ne}(d, p)^{21}\text{Ne}$ for studies of s-process and neutron poisoning

# Program



## Friday

09:00 – 09:30	Christoph Langer	Recent experimental progress for measurements of reaction rates involving radioactive nuclei
09:30 – 09:45	Alec Hamaker	Mass measurements of rare isotopes for improved rp-process modeling at the LEBIT facility
09:45 – 10:15	Zach Meisel	Mapping the Nuclear Mass Surface
10:15 – 10:30	Dinko Atanasov	Precision mass measurements at ISOLTRAP for nucleosynthesis studies
10:30 – 11:00	COFFEE	
11:00 – 11:30	Marialuise Aliotta	Exploring Stars from Deep Underground: Status and Perspectives at LUNA
11:30 – 11:45	Denise Piatta	The Study of the ${}^6\text{Li}(p,\gamma){}^7\text{Be}$ Reaction at LUNA
11:45 – 12:00	Daniel Robertson	CASPAR and DIANA: Recent and Future Underground Nuclear Astrophysics Results
12:00 – 12:30	Christian Weinheimer	Neutrinos and dark matter in astrophysics
12:30 – 14:00	LUNCH	

### Session Chairs:

Mon – morning: Klaus Blaum  
Mon – afternoon: Almudena Acrones

Tue – morning: Yuri Litvinov  
Tue – afternoon: Falk Herwig

Wed – morning: Uwe Greife

Thu – morning: Ani Aprahamian  
Thu – afternoon: Alberto Mengoni

Fr – morning: Tanja Heftrich