

HELIUM25 - Helium burning and perspectives for underground labs

Monday 21 July 2025

Science session: Models - Building 114, Room 202 (14:20 - 15:30)

-Conveners: Jakub Skowronski

time	[id] title	presenter
14:20	[16] Fluorine Nucleosynthesis in AGB stars	Dr CRISTALLO, Sergio
14:55	[17] Helium burning and its role in the synthesis of key heavy elements	Dr ROBERTI, Lorenzo

Science session: Models - Building 114, Room 202 (16:00 - 17:05)

-Conveners: Lorenzo Roberti

time	[id] title	presenter
16:00	[19] Helium Burning and Beyond: Linking Stellar Models, Binary Evolution, and Neural Networks	Dr GRICHENER, Aldana
16:25	[20] Observing Intermediate-mass Black Holes and the Upper Stellar-mass gap with LIGO and Virgo	Dr MEHTA, Ajit
16:50	[57] Tracing α -Element Enrichment in the Globular Clusters of the Starburst Dwarf Galaxy IC 10: Insights from Galactic Chemical Evolution Modeling	Dr GHOLAMI, Mahtab

Tuesday 22 July 2025

Science session: Worldwide Facilities for Nuclear Astrophysics - Building 114, Room 202 (09:00 - 10:30)

-Conveners: Denise Piatti

time	[id] title	presenter
09:00	[21] Status and perspectives of LUNA	Dr FERRARO, Federico
09:30	[22] Helium-burning reactions at DRAGON/TRIUMF	Dr LENNARZ, Annika
10:00	[23] Status of Felsenkeller and perspectives of underground labs in Germany	Dr BOELTZIG, Axel

Science session: Worldwide Facilities for Nuclear Astrophysics - Building 114, Room 202 (11:00 - 12:30)

-Conveners: Steffen Turkat

time	[id] title	presenter
11:00	[24] Exploring He burning with storage rings	Dr MARSH, Jordan
11:30	[25] Helium burning with Trojan-Horse method	Dr SPARTÀ, Roberta
12:00	[26] Results and progress of the JUNA underground laboratory	Prof. LIU, Weiping

Science session: Worldwide Facilities for Nuclear Astrophysics - Building 114, Room 202 (14:00 - 15:00)

-Conveners: Annika Lennarz

time	[id] title	presenter
14:00	[27] Current status and future plans for CASPAR underground lab	Prof. ROBERTSON, Daniel
14:30	[28] Helium burning studies at n_TOF	Prof. MENGONI, Alberto

Science session: Towards tomorrow topic - Building 114, Room 202 (15:30 - 17:00)

-Conveners: Roberta Sparta'

time	[id] title	presenter
15:30	[29] Gamma-decay branching ratio of the Hoyle State	Dr PAULSEN, Wanja
16:00	[30] The $^{12}\text{C}(\alpha, \text{g})^{16}\text{O}$ reaction at astrophysical energies - status and missing inputs for R-matrix extrapolations	Dr DEBOER, Richard James
16:30	[44] COREA detector and perspectives for the $^{12}\text{C}+\alpha$ at BIBA	AHN, Jung Keun

Wednesday 23 July 2025

Science session: The Holy Grail - Building 114, Room 202 (09:00 - 10:30)

-Conveners: Weiping Liu

time	[id] title	presenter
09:00	[31] The $^{12}\text{C}(\alpha, \gamma)^{16}\text{O}$ reaction using TPC detectors and gamma beam	Dr SMITH, Robin
09:30	[32] The status and future plans of $^{12}\text{C}(\alpha, \gamma)^{16}\text{O}$ reaction at ERNA	Dr SANTONASTASO, Claudio
10:00	[33] Structure of the ^{12}C nucleus and the triple alpha process in stars	Prof. LOMBARDO, Ivano

Science session: The Holy Grail - Building 114, Room 202 (11:00 - 11:30)

-Conveners: Jordan Marsh

time	[id] title	presenter
11:00	[45] Measurements of the $^{12}\text{C} + \alpha$ reaction at JUNA, results and perspectives	Dr SHENG, Yangping

Science session: n-sources - Building 114, Room 202 (14:00 - 15:30)

-Conveners: Melina Avila

time	[id] title	presenter
14:00	[34] $^{13}\text{C}(\alpha, n)^{16}\text{O}$ reaction, results and further plans	Dr CSEDREKI, László
14:30	[35] Status of the $^{22}\text{Ne}(\alpha, n)^{25}\text{Mg}$ reaction	Prof. BEST, Andreas
15:00	[36] Alpha transfer technique to constrain $^{22}\text{Ne}(\alpha, n)^{25}\text{Mg}$ rate	Dr JAYATISSA, Heshani

Science session: Alpha Induced Reactions - Building 114, Room 202 (16:00 - 17:00)

-Conveners: Robin Smith

time	[id] title	presenter
16:00	[37] Alpha induced reaction in X-ray Burst	Dr AVILA, Melina
16:20	[38] Investigation of the $^{15}\text{N}(\alpha, \gamma)^{19}\text{F}$ reaction at resonance energies $E_r = 1.3$ and 1.4 MeV at Notre Dame	Dr FANG, Ruoyu
16:40	[39] Measurement of the $^{14}\text{N}(\alpha, \gamma)^{18}\text{F}$ reaction at Felsenkeller using a new Gas-Jet Target	YADAV, Anup

Friday 25 July 2025

Science session - Building 114, Room 202 (09:00 - 10:00)

-Conveners: Benjamin Wehmeyer

time	[id] title	presenter
09:00	[40] Effects of Mass Loss and Convective Overshooting on Pre-Supernova Neutrinos from Red Supergiants	Dr MYERS, McKenzie
09:20	[41] Abundance Analysis of the Turrانبurra and Willka Yaku Stellar Streams	Dr WEBBER, Kaitlin
09:40	[42] Spectral Distribution Method to alpha-Induced Reactions in Stellar He-Burning Environments	Dr SAXENA, Gaurav