Topical meeting of IReNA - FA1 and ChETEC-INFRA: Nuclear reaction measurements in Underground Laboratories

Remote talks are in blue. In-person talks are in black.

Schedule as of 4 April 2022

Tuesday April 5				
Session [Chair]	**Time (CEST)**	**Talk+Q&A (min)**	**Speaker (Affiliation) [Remote Speaker Time Zone**	**Topic**
1: H-burning, Experiment [Gianluca Imbriani]	10:10	10	Zach Meisel & Daniel Bemmerer	Welcome
	10:20	15+5	Rosanna Depalo (LUNA Milan)	Stellar H-burning with LUNA
	10:40	15+5	Richard Longland (NC State, TUNL)	H-burning at LENA
	11:00	15+5	Michael Wiescher (Notre Dame)	Recent results from CASPAR
	11:20	20	*Break*	
2: H-burning, Theory [Daniel Bemmerer]	11:40	15+5	Daniel Phillips (Ohio U)	EFT & Bayesian methods for solar fusion
	12:00	15+5	Laura Marcucci (Pisa)	Ab initio studies of few-nucleon systems for astrophysics
	12:20	15+5	Ofelia Pisanti (INFN Naples)	Big Bang Nucleosynthesis
	12:40	15+5	Maria Lugaro (Konkoly Observatory) [CEST]	Constraining H-burning with meteorites
	13:00	90	*Lunch*	
3: H-burning III [Michael Wiescher]	14:30	10+2	Carlo Gustavino (INFN Roma)	BBN at LUNA
	14:42	10+2	Tamas Szucs (ATOMKI)	3He(a,g) for BBN and the pp chain
	14:54	adjourn formal part of day		

Wednesday April 6				
Session	**Time (CEST)**	**Talk+Q&A (min)**	**Speaker (Affiliation) [Remote Speaker Time Zone**	**Topic**
4: He-burning I [Richard Longland]	10:00	15+5	Morgan Chidester (ASU) [MST, CEST-9]	12C(a,g) and white dwarf seismology
	10:20	15+5	Jack Bishop (TAMU) [BST, CEST-1]	Indirect measurements at TAMU
	10:40	15+5	Lucio Gialanella (Naples)	Direct measurements at CIRCE
	11:00	15+5	Ivano Lombardo (INFN Catania)	The Hoyle state and triple-alpha process
	11:20	15+5	James deBoer (Notre Dame)	R-Matrix analyses of 13C(a,n)
	11:40	20	*Break*	
5: He- burning II [Aurora Tumino]	12:00	15+5	Oscar Straniero (INAF)	Helium burning and beyond
	12:20	15+5	Jianjun He (Beijing NU) [Beijing, CEST+6]	19F(p,ag) at JUNA
	12:40	15+5	Weiping Liu (CIAE) [Bejing, CEST+6]	JUNA vision/program
	13:00	90	*Lunch*	
6: Below Ground Programs [Lucio Gialanella]	14:30	15+5	Axel Boeltzig (HZDR)	Opportunities at Felsenkeller
	14:50	15+5	Michael Wiescher (Notre Dame)	CASPAR: the vision for a future
	15:10	15+5	Antonino diLeva (LNGS) [CEST]	Outlook on LUNA-MV program
	15:30	15+5	Matthias Junker (LNGS)	Outlook of the LNGS Accelerator facility
	15:50	20	*Break*	
7: Discussion	16:10	90	*Leaders:* Marialuisa Aliotta & Alba Formicola	Focus on 12C(a,g)
	17:40	adjourn formal part of day		

Thursday April 7				
Session	**Time (CEST)**	**Talk+Q&A (min)**	**Speaker (Affiliation) [Remote Speaker Time Zone**	**Topic**
8: C-burning, Experiment [Phil Adsley]	10:00	15+5	Aurora Tumino (Kore University)	Indirect measurements for 12C+12C fusion
	10:20	15+5	Wanpeng Tan (Notre Dame)	Recent direct measurements of carbon fusion
	10:40	15+5	Liz Morales-Gallegos (INFN) [CEST]	12C+12C with the GASTLY array
	11:00	15+5	Sandrine Courtin (IPHC Strasbourg) [CEST]	12C+12C results from the STELLA collaboration
	11:20	20	*Break*	
9: C-burning, Theory [Annika Lennarz]	11:40	15+5	Masaaki Kimura (Hokkaido) [JST, CEST+7]	12C+12C S-factor with a fully microscopic model
	12:00	15+5	Leandro Gasques (Sao Paulo)	Inelastic couplings for sub-barrier 12C+12C
	12:20	15+5	Alessandro Chieffi (INAF)	Role of 12C+12C in massive star evolution
	12:40	15+5	Ed Brown (MSU) [EST, CEST-6]	X-ray superbursts
	13:00	90	*Lunch*	
10: C-burning III [Annika Lennarz]	14:30	15+5	Akram Mukhamedzhanov (TAMU) [CDT, CEST -7]	THM constraint for 12C+12C
11: Discussion	14:50	90	*Leaders:* Zach Meisel & Rene Reifarth	Focus on 12C+12C
	16:20	adjourn formal part of day		

Friday April 8				
Session	**Time (CEST)**	**Talk+Q&A (min)**	**Speaker (Affiliation) [Remote Speaker Time Zone**	**Topic**
12: Neutron Sources I [James deBoer]	10:00	15+5	Amanda Karakas (Monash) [AEST, CEST+10]	Asymptotic giant branch stars
	10:20	15+5	Andreas Best (Naples)	Neutrons deep underground
	10:40	15+5	Annika Lennarz (TRIUMF)	Direct measurements with DRAGON
	11:00	15+5	Marco LaCognata (INFN Catania)	Concordance scenario for the 13C(a,n) s-factor
	11:20	15+5	Phil Adsley (TAMU)	Indirect measurements of 22Ne+a
	11:40	20	*Break*	
13: Neutron Sources II [Leandro Gasques]	12:00	15+5	Marek Ploszajczak (GANIL)	Near-threshold cluster resonances
	12:20	15+5	Marco Pignatari (Konkoly Observatory)	The s-process in stars and (a,n) reactions
	12:40	15+5	Aldo Serenelli (Barcelona) [CEST]	H-burning in stellar cores and shells
	13:00	90	*Lunch*	
14: Neutron Sources III [Matthias Junker]	14:30	15+5	Xiadong Tang (IMP) [EST, CEST-6]	(a,n) at JUNA
	14:50	10+2	Mario Cirillo (INAF)	AGB stars at low-metallicity
	15:02	10+2	Lorenzo Roberti (Konkoly)	S-process at low metallicity
	15:14	10+2	David Rapagnani (INFN Naples)	13C(a,n) R-Matrix analysis
	15:26	10+2	Erin White (MSU)	The SAM project and 22Ne(a,n)
	15:38	12	*Break*	
15: Discussion	15:50	90	James Deboer & Aurora Tumino	Focus on 13C(a,n) and 22Ne(a,n)
	17:20	adjourn formal part of day		