



# XVIII International Conference on Topics in Astroparticle and Underground Physics (TAUP 2023)

## Monday 28 August 2023

### Plenary session - Audimax (09:30 - 10:30)

-Conveners: Jochen Schieck

time	[id] title	presenter
09:30	[7] Observational cosmology – overview	LATTANZI, Massimiliano
10:00	[606] Cosmic inflation and the primordial universe	PALMA, Gonzalo

### Plenary session - Audimax (11:00 - 13:00)

-Conveners: Georg Raffelt

time	[id] title	presenter
11:00	[9] Physics with the large-scale structure of the Universe	HAHN, Oliver
11:30	[10] Dark Energy - new experiments	SOARES-SANTOS, Marcelle
12:00	[11] Theory of neutrino masses, mixing, and interactions	DE GOUVEA, Andre
12:30	[12] Detection of supernovae, solar and geo-neutrinos – review	SEKIYA, Hiroyuki

# Tuesday 29 August 2023

## Plenary session - Audimax (09:00 - 10:30)

-Conveners: David Sinclair

time [id]	title	presenter
09:00	[13] Short-baseline oscillations and sterile neutrinos (reactor/accelerators)	WEN, Liangjian
09:30	[14] Long-baseline and atmospheric neutrino experiments – review	SANCHEZ, Mayly
10:00	[15] Coherent elastic neutrino-nucleus scattering	VIGNATI, Marco

## Plenary session - Audimax (11:00 - 12:30)

-Conveners: Frank Avignone

time [id]	title	presenter
11:00	[16] Direct neutrino mass measurements – review	Prof. MERTENS, Susanne LASSERRE, thierry
11:30	[17] Double Beta Decay review (theory & experiment)	MOORE, David
12:00	[617] Evidence of Neutrinos from the Galactic Plane - Flash plenary talk	Dr SCLAFANI, Steve
12:15	[18] Evidence for a Gravitational-Wave Background at Nanohertz Frequencies - Flash plenary talk	SCHMITZ, Kai

# Wednesday 30 August 2023

## Plenary session - Audimax (09:00 - 10:30)

-Conveners: Loredana Gastaldo

time [id]	title	presenter
09:00	[598] Review on dark matter models (heavy & light)	CIRELLI, Marco
09:30	[20] Direct detection of light dark matter particles (< ~ 1 GeV)	SCHAEFFNER, Karoline Julia
10:00	[21] Direct detection of heavy dark matter particles (> ~1 GeV)	KUZNIAK, Marcin

## Plenary session - Audimax (11:00 - 12:30)

-Conveners: Silvia SCORZA

time [id]	title	presenter
11:00	[22] Axion dark matter (theory & experiment)	RINGWALD, Andreas
11:30	[23] Dark matter searches at colliders	PINNA, Deborah
12:00	[24] Dark Matter searches from astrophysical and cosmological observations	BELL, Nicole

# Thursday 31 August 2023

## Plenary session - Audimax (09:00 - 10:30)

-Conveners: Jose Bernabeu

time [id]	title	presenter
09:00	[26] Status of the ground interferometers for gravitational wave detection	Prof. MAVALVALA, Nergis
09:30	[607] Gravitational wave observational results and prospects	Prof. BRADY, Patrick
10:00	[28] Next generation instruments for gravitational-wave observation	Dr PUNTURO, Michele

## Plenary session - Audimax (11:00 - 12:30)

-Conveners: Livia Ludhova

time [id]	title	presenter
11:00	[29] LISA: Gravitational-wave detection in space	DANZMANN, Karsten
11:30	[33] Towards revolutionary observations in MeV Gamma-ray astronomy [MeV and below]	Dr AJELLO, Marco
12:00	[611] Diversity and inclusion in physics	CONDE MUINO, Patricia

# Friday 1 September 2023

## Plenary session - Audimax (09:00 - 10:30)

-Conveners: Olaf Reimer

time [id]	title	presenter
09:00	[32] Gamma-ray astronomy from ground and space [GeV and above]	CAO, Zhen
09:30	[613] Interpretation of direct measurement of galactic cosmic rays	Prof. DONATO, Fiorenza
10:00	[614] Observations of Ultra-High-Energy Cosmic Rays	Prof. MAYOTTE, Eric

## Plenary session - Audimax (11:00 - 12:30)

-Conveners: Nicolao Fornengo

time [id]	title	presenter
11:00	[36] The Neutrino Windows to the Extreme Universe and Multimessenger Astronomy	TAMBORRA, Irene
11:30	[30] Accessible science outreach in astro and underground physics	WALTER, Constance
12:00	[37] Deep underground laboratories - multidisciplinary research	Prof. KIM, Yeongduk