

Session Program

2-6 Dec 2019

TeV Particle Astrophysics 2019

Plenary

Monday 2 December

09:00

Plenary

Session | **Location:** Messel Lecture Theatre (SNH 4002) | **Convener:** Gianfranco Bertone

09:00–09:30 **TBA**

Speaker

celine boehm

09:30–10:00

Dark matter bound states: overhauling our understanding of thermal decoupling at the TeV scale

Speaker

Kalliopi Petraki

10:00–10:30

Testing the WIMP paradigm (an many others) with ultra-low background massive xenon detectors

Speaker

Luca Grandi

10:30

11:00

Plenary

Session | **Location:** Messel Lecture Theatre (SNH 4002) | **Convener:** Luca Grandi

11:00–11:30 **Capture of Dark Matter in Neutron Stars**

Speaker

Nicole Bell

11:30–12:00 **The latest results of the Dark Matter Particle Explorer (DAMPE)**

Speaker

Jingjing ZANG

12:00–12:30 **DarkSide-20k and the Direct Dark Matter Search with Liquid Argon**

Speaker

Thomas Nathan Thorpe

12:30–13:00

WIMP dark matter searches with NaI: Status of the SABRE experiment and SUPL laboratory

Speaker

Gregory Lane

13:00

Tuesday 3 December

09:00

Plenary

Session | **Location:** Messel Lecture Theatre (SNH 4002) | **Convener:** celine boehm

09:00–09:30

Probing dark matter with galaxies

Speaker

joseph silk

09:30–10:00

The 21cm probe of cosmology

Speaker

Xuelei Chen

10:00–10:30

Shining a light on the dark side of cosmology

Speaker

Prof. Geraint Lewis

10:30

11:00

Plenary

Session | **Location:** Messel Lecture Theatre (SNH 4002) | **Convener:** Emanuela Dimastrogiovanni

11:00–11:30

Cosmology after Planck

Speaker

Jan Hamann

11:30–12:00

ETHOS: Structure formation with non-gravitational dark matter interactions

Speaker

Torsten Bringmann

12:00–12:30

Neutrino cosmology

Speaker

Yvonne Wong

12:30–13:00

Fast radio bursts - Past, present and future

Speaker

Shivani Bhandari

13:00

Wednesday 4 December

09:00

Plenary

Session | Location: Messel Lecture Theatre (SNH 4002) | Convener: Miroslav Filipovic

09:00-09:30 TeV emission - GRB's Rosetta Stone

Speaker

Tsvi Piran

09:30-10:00

Supernova Remnants in the Galaxy - too many, too few and so diverse?

Speaker

Anne Green

10:00-10:30

X-ray and Gamma-ray View of Particle Acceleration in Galactic Sources

Speaker

Prof. Yasunobu Uchiyama

10:30

11:00

Plenary

Session | Location: Messel Lecture Theatre (SNH 4002) | Convener: Francesca Calore

11:00-11:30

CR Acceleration Mechanisms: New Challenges From High-Fidelity Observations

Speaker

Mikhail Malkov

11:30-12:00

Pulsar origins of the Galactic Centre Excess

Speaker

Shunsaku Horiuchi

12:00-12:30

Cosmic ray feedback in star-formation and implications for gamma-ray emission from starbursts

Speaker

Roland Crocker

12:30-13:00

Latest Results from the Alpha Magnetic Spectrometer

Speaker

Weiwei Xu

13:00

Thursday 5 December

09:00

Plenary

Session | **Location:** Messel Lecture Theatre (SNH 4002) | **Convener:** Michael Schmidt

09:00–09:30 **Phenomenological and theoretical perspectives in neutrino physics**

Speaker

Srubabati Goswami

09:30–10:00 **Long-lived particles at current and future collider experiments**

Speaker

Andrea Thamm

10:00–10:30 **Ultra High Energy Cosmic Rays from Dark Matter**

Speaker

Zurab Berezhiani

10:30

11:00

Plenary

Session | **Location:** Messel Lecture Theatre (SNH 4002) | **Convener:** Csaba Balazs

11:00–11:30

Gravitational Wave Discoveries and Science from the First, Second and Third Observing Runs of Advanced LIGO and Advanced Virgo

Speaker

Susan Scott

11:30–12:00 **Radio Follow-up of Gravitational Wave Events**

Speaker

Prof. Tara Murphy

12:00–12:30 **Probing Extreme Gravity through Gravitational-wave Observations**

Speaker

Kent Yagi

12:30–13:00 **Multimessenger probes of the Fermi GeV excess nature**

Speaker

Francesca Calore

13:00

Friday 6 December

09:00

Plenary

Session | **Location:** Messel Lecture Theatre (SNH 4002) | **Convener:** Jenni Adams

09:00–09:30

The Cherenkov Telescope Array: a new eye on the TeV sky

Speaker

Dr Roberta Zanin

09:30–10:00

Linking TeV and THz astronomy (gamma-ray and radio astrophysics connections)

Speaker

Dr Gavin Rowell

10:00–10:30

Exploring the Universe with High Energy Neutrinos

Speaker

Gary Hill

10:30

11:00

Plenary

Session | **Location:** Messel Lecture Theatre (SNH 4002) | **Convener:** Susumu Inoue

11:00–11:30

Time-Dependent Models for Cosmic Rays and Diffuse Emissions from the Galaxy

Speaker

Troy Porter

11:30–12:00

Recent results on ultra-high energy cosmic rays from the Pierre Auger Observatory

Speaker

Bruce Dawson

12:00–12:30

The Status and First Results of LHAASO Experiment

Speaker

Zhen Cao

12:30–12:45

The detection of VHE emission in the deep afterglow of GRB 180720B

Speaker

Edna Ruiz-Velasco

12:45–13:00

Inverse Compton emission revealed by observations up to TeV energies of GRB190114C

Speaker

Elena Moretti

13:00–13:30

Concluding remarks

Speaker

Gianfranco Bertone

13:30