

Session Program

12-16 Sept 2016

TeV Particle Astrophysics 2016
Cosmology & Gravitational Waves

CERN

Monday 12 September

14:00

Cosmology & Gravitational Waves: I

Session | **Location:** CERN, 13/2-005 | **Convener:** Marco Drewes

14:00–14:20

A strong first order electroweak phase transition from varying yukawas at the weak scale

Speaker

Iason Baldes

14:20–14:40

CP-violation and baryon-asymmetry from varying Yukawas at the weak scale.

Speaker

Sebastian Bruggisser

14:40–15:00

Falsifying Baryogenesis Models via Observation of Lepton Number Violation

Speaker

Frank Deppisch

15:00–15:20

Higgs doublet decay as the origin of the baryon asymmetry

Speaker

Dr Daniele Teresi

15:20–15:40

Leptogenesis from Oscillations of Heavy Neutrinos with Large Mixing Angles

Speaker

Mr Juraj Klaric

15:40–16:00

Challenges for leptogenesis at the TeV scale

Speaker

Enrico Nardi

16:00

Tuesday 13 September

14:00

Cosmology & Gravitational Waves: II

Session | **Location:** CERN, 6/2-024 - BE Auditorium Meyrin | **Convener:** David Richard Harvey

14:00–14:20

Originating the hot Big Bang from the Standard Model Higgs

Speaker

Daniel G. Figueroa

14:20–14:40

Gravitational waves from oscillons after inflation

Speaker

Francesco Cefalà

14:40–15:00

Probing BSM physics at eLISA

Speaker

Germano Nardini

15:00–15:20

Pick any two? Baryogenesis, gravitational waves and thermal phase transitions

Speaker

David Weir

15:20–15:40

Probing the nature of the electroweak phase transition/baryogenesis from the particle colliders to the gravitational wave detectors

Speaker

Fa Peng Huang

15:40–16:00

Probing the expansion of the Universe using gravitational wave standard sirens at eLISA

Speaker

Chiara Caprini

16:00

Thursday 15 September

14:00

Cosmology & Gravitational Waves: III

Session | **Location:** CERN, 500/1-001 - Main Auditorium | **Convener:** David Richard Harvey

14:00–14:20

Towards a more precise prediction of the dark matter relic density

Speaker

Björn Herrmann

14:20–14:40

Tachyonic Reheating to a Higgs Boson

Speaker

Djuna Croon

14:40–15:00

Solving five problems of particle physics and cosmology in one stroke

Speaker

Guillermo Ballesteros Martinez

15:00–15:20

From warm dark matter to dark radiation: General cosmological constraints on a second dark component in the Universe

Speaker

Mrs Roberta Diamanti

15:20–15:40

Including massive neutrinos in nonlinear perturbation theory

Speaker

Dr Helene Dupuy

15:40–16:00

Challenges to Cosmic Self-Acceleration in Modified Gravity from Gravitational Waves and Large-Scale Structure

Speaker

Dr Lucas Lombriser

16:00

16:30

Cosmology & Gravitational Waves: IV

Session | **Location:** CERN, 4/3-006 - TH Conference Room | **Convener:** Damir Buskalic

16:30–16:50

The detection of binary black holes in Advanced LIGO's first scientific run

Speaker

Dr Edward Porter

16:50–17:10

Parameter inference for compact binaries with the gravitational-wave observatory Advanced LIGO

Speaker

Vivien RAYMOND

17:10–17:30

Advanced LIGO First Light: Multimessenger Astrophysics at the Birth of Gravitational-Wave Observatory

Speaker

Leo Singer

17:30–17:50

Searches for continuous gravitational waves in the advanced detector era

Speaker

Graham Woan

17:50–18:10

Tests of general relativity with gravitational waves

Speaker

Dr Chris Van Den Broeck

18:10–18:30

The search for a stochastic background of gravitational waves

Speaker

Dr Giancarlo Cella

18:30