

Session Program

3-10 Aug 2016



38th INTERNATIONAL CONFERENCE ON HIGH ENERGY PHYSICS

AUGUST 3 - 10, 2016
CHICAGO

ICHEP 2016 Chicago

Astro-particle Physics and Cosmology

Chicago IL USA
Sheraton Grand Chicago 301 East Water Street Chicago IL 60611 USA

Thursday 4 August

09:00

Astro-particle Physics and Cosmology: AMS/Holometer

Session | **Location:** Chicago 10, Sheraton Grand Chicago 301 East Water Street Chicago IL 60611 USA | **Convener:** Kirsten Anne Tollefson

09:00–09:15

Precision Measurement of the ($e^+ + e^-$) Flux in Primary Cosmic Rays from 0.5 GeV to 1 TeV with the Alpha Magnetic Spectrometer on the International Space Station (12' + 3')

Speaker

Valerio Vagelli

09:15–09:30

Precision measurement of the antiproton-to-proton ratio by the Alpha Magnetic Spectrometer on the International Space Station (12' + 3')

Speaker

Andrew Chen

09:30–09:45

Precision Measurement of Boron-to-Carbon and Carbon-to-Helium flux ratio in Cosmic Rays from 2 GV to 2 TV with the Alpha Magnetic Spectrometer on the International Space Station. (12' + 3')

Speaker

Alberto Oliva

09:45–10:05

Search for Space-Time Correlations from the Planck Scale with the Fermilab Holometer (15' + 5')

Speaker

Dr Chris Stoughton

10:05–10:25

Exotic Rotational Correlations from Quantum Geometry (15' + 5')

Speaker

Prof. Craig Hogan

10:25–10:45

Sterile neutrino dark matter and the 3.5 keV line (15' + 5')

Speaker

Shunsaku Horiuchi

10:45–11:00

Hints of new physics from stars (12' + 3')

Speaker

Maurizio Giannotti

11:00

11:30

Astro-particle Physics and Cosmology: Ultra-high Energy Cosmic Rays

Session | **Location:** Chicago 10 | **Convener:** Prof. Justin Vandenbroucke

11:30–11:50

Latest Results from the Pierre Auger Observatory (15' + 5')

Speaker
Olivier Deligny

11:50-12:10 Results from the Telescope Array Experiment (15' + 5')

Speaker
Prof. Charles Jui

12:10-12:25

Search for anisotropy of UHECR with the Telescope Array experiment (12' + 3')

Speaker
Peter Tinyakov

12:25-12:40

Detection of High Energy Cosmic Rays at the Auger Engineering Radio Array (12' + 3')

Speaker
Sijbrand De Jong

12:40-12:55

First Results from the Telescope Array RADAR (TARA) Cosmic Ray Observatory Remote Stations (12' + 3')

Speaker
steven prohira

12:55-13:15

The Origin of the Broken Power Law Spectrum for Cosmic Rays (15' + 5')

Speaker
John Swain

13:15-13:30 Prompt atmospheric neutrino flux (12' + 3')

Speaker
Dr Yu Seon Jeong

13:30

14:30

Astro-particle Physics and Cosmology: Gamma Ray Astrophysics

Session | Location: Chicago 10 | **Convener:** Karen Byrum

14:30-14:50 VERITAS Observations of the Galactic Center (15' + 5')

Speaker
Amanda Weinstein

14:50-15:10

Multimessenger studies with the VERITAS Atmospheric Cherenkov Telescope (15' + 5')

Speaker
Marcos Santander

15:10-15:30

Measurement of the Cosmic-ray Electron Spectrum with VERITAS (15' + 5')

Speaker
David Staszak

15:30-15:50

Observation of Galactic Cosmic Rays and Gamma Rays with the High Altitude Water Cherenkov Observatory (15' + 5')

Speaker

Segev BenZvi

15:50-16:10

Searches for Dark Matter and Primordial Black Holes with the High Altitude Water Cherenkov (HAWC) Gamma-ray Observatory (15' + 5')

Speaker

Kirsten Anne Tollefson

16:10-16:30

Fundamental physics with the Cherenkov Telescope Array (15' + 5')

Speaker

Prof. Justin Vandenbroucke

16:30

Friday 5 August

09:00

Astro-particle Physics and Cosmology: Large Scale Structure

Session | Location: Chicago 10 | Convener: Shirley Ho

09:00-09:15

Strong Lensing Search and Confirmation Results from the Dark Energy Survey (12' + 3')

Speaker

Brian Nord

09:15-09:30

Galaxy Clusters in DES: latest results (12' + 3')

Speaker

Marcelle Soares-Santos

09:30-09:45

Cosmology from Clusters and Joint SPT-DES Analyses of Clusters in the SPT-SZ survey (12' + 3')

Speaker

Lindsey Bleem

09:45-10:05

The Dark Energy Spectroscopic Instrument (DESI) and Survey (15' + 5')

Speaker

brenna flaugher

10:05-10:25

In the era of large scale surveys: from BOSS to WFIRST (15' + 5')

Speaker

Shirley Ho

10:25-10:45

Disentangling redshift-space distortions and nonlinear bias using large scale structure dynamics (15' + 5')

Speaker

Elise Jennings

10:45-11:00

Non-Gaussian Covariance of the Matter Power Spectrum in the Effective Field Theory of Large Scale Structure (12' + 3')

Speaker

Mikhail Solon

11:00

14:30

Astro-particle Physics and Cosmology: Cosmic Microwave Background and Inflation

Session | Location: Chicago 10 | Convener: Bradford Benson

14:30-15:10

SPIDER: Exploring the dawn of time from above the clouds and News from BICEP/Keck Array CMB program(35' + 5')

Speaker

Jeffrey Filippini

15:10-15:30 **Constraining Inflation and Neutrino Mass with CLASS (15' + 5')****Speaker**

Tobias Marriage

15:30-15:50**Cosmology and particle physics with POLARBEAR and Simons Array (15' + 5')****Speaker**

MASAYA HASEGAWA

15:50-16:10 **Constraining inflation with dark matter (15' + 5')****Speaker**

Layne Price

16:10-16:30**Probing the Electroweak Phase Transition with Colliders and Gravitational Waves (15' + 5')****Speaker**

Andrew Long

16:30

Saturday 6 August

09:00

Astro-particle Physics and Cosmology: Cosmic Microwave Background and Neutrinos

Session | Location: Chicago 10 | Convener: Jeffrey Filippini

09:00–09:15 **The South Pole Telescope (12' + 3')**

Speaker

Bradford Benson

09:15–09:30 **Latest Results from SPTpol (12' + 3')**

Speaker

Jason Henning

09:30–09:50

The Atacama Cosmology Telescope: recent results and future prospects (15' + 5')

Speaker

Matthew Hasselfield

09:50–10:10

The Next Generation Cosmic Microwave Background Experiment, CMB-S4 (15' + 5')

Speaker

Jeff McMahon

10:10–10:30 **Planck constraints on neutrino physics (15' + 5')**

Speaker

Jan Hamann

10:30–10:45 **Type II leptogenesis (12' + 3')**

Speaker

Prof. Jihn E. Kim

10:45

11:15

Astro-particle Physics and Cosmology: Gravitational Wave Detection: Present and Future

Session | Location: Chicago 7 | Convener: Shirley Ho

11:15–11:50

LIGO's First Observing Run: Gravitational-Wave Astronomy on the Rise (30' + 5')

Speaker

Chris Pankow

11:50–12:25

The Advanced LIGO detectors at the beginning of the new gravitational wave era (30' + 5')

Speaker

Lisa Barsotti

12:25–13:00

The State of Gravitational Wave Detection with Pulsar Timing Arrays (30' + 5')

13:00

Speaker
Scott Ransom