

## Session Program

Aug 3 - 10, 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

## Thu, August 4

9:00 AM

### 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

9:00 - 9:15 AM

**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

9:15 - 9:30 AM

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

**Speaker**

Andrew Chen

9:30 - 9:45 AM

**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

9:45 - 10:05 AM

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

**Speaker**

Dr Chris Stoughton

10:05 - 10:25 AM

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

**Speaker**

Prof. Craig Hogan

10:25 - 10:45 AM

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

**Speaker**

Shunsaku Horiuchi

10:45 - 11:00 AM

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

**Speaker**

Maurizio Giannotti

11:00 AM

11:30 AM

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

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

11:30 - 11:50 AM

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

	<p><b>Speaker</b> Olivier Deligny</p>
	<p><b>11:50 AM - 12:10 PM</b>    <b>Results from the Telescope Array Experiment (15' + 5')</b></p> <p><b>Speaker</b> Prof. Charles Jui</p>
	<p><b>12:10 - 12:25 PM</b></p> <p><b>Search for anisotropy of UHECR with the Telescope Array experiment (12' + 3')</b></p> <p><b>Speaker</b> Peter Tinyakov</p>
	<p><b>12:25 - 12:40 PM</b></p> <p><b>Detection of High Energy Cosmic Rays at the Auger Engineering Radio Array (12' + 3')</b></p> <p><b>Speaker</b> Sijbrand De Jong</p>
	<p><b>12:40 - 12:55 PM</b></p> <p><b>First Results from the Telescope Array RADAR (TARA) Cosmic Ray Observatory Remote Stations (12' + 3')</b></p> <p><b>Speaker</b> steven prohira</p>
	<p><b>12:55 - 1:15 PM</b></p> <p><b>The Origin of the Broken Power Law Spectrum for Cosmic Rays (15' + 5')</b></p> <p><b>Speaker</b> John Swain</p>
	<p><b>1:15 - 1:30 PM</b>    <b>Prompt atmospheric neutrino flux (12' + 3')</b></p> <p><b>Speaker</b> Dr Yu Seon Jeong</p>
	<p><b>1:30 PM</b></p> <p><b>2:30 PM</b></p> <p><b>Astro-particle Physics and Cosmology: Gamma Ray Astrophysics</b>  <b>Session</b>   <b>Location:</b> Chicago 10   <b>Convener:</b> Karen Byrum</p>
	<p><b>2:30 - 2:50 PM</b>    <b>VERITAS Observations of the Galactic Center (15' + 5')</b></p> <p><b>Speaker</b> Amanda Weinstein</p>
	<p><b>2:50 - 3:10 PM</b></p> <p><b>Multimessenger studies with the VERITAS Atmospheric Cherenkov Telescope (15' + 5')</b></p> <p><b>Speaker</b> Marcos Santander</p>
	<p><b>3:10 - 3:30 PM</b></p> <p><b>Measurement of the Cosmic-ray Electron Spectrum with VERITAS (15' + 5')</b></p> <p><b>Speaker</b> David Staszak</p>

3:30 - 3:50 PM

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

**Speaker**

Segev BenZvi

3:50 - 4:10 PM

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

**Speaker**

Kirsten Anne Tollefson

4:10 - 4:30 PM

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

**Speaker**

Prof. Justin Vandenbroucke

4:30 PM

## Fri, August 5

9:00 AM

### Astro-particle Physics and Cosmology: Large Scale Structure

Session | Location: Chicago 10 | Convener: Shirley Ho

9:00 - 9:15 AM

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

Speaker

Brian Nord

9:15 - 9:30 AM

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

Speaker

Marcelle Soares-Santos

9:30 - 9:45 AM

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

Speaker

Lindsey Bleem

9:45 - 10:05 AM

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

Speaker

brenna flaugher

10:05 - 10:25 AM

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

Speaker

Shirley Ho

10:25 - 10:45 AM

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

Speaker

Elise Jennings

10:45 - 11:00 AM

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

Speaker

Mikhail Solon

11:00 AM

2:30 PM

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

Session | Location: Chicago 10 | Convener: Bradford Benson

2:30 - 3:10 PM

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

**Speaker**  
Jeffrey Filippini

**3:10 - 3:30 PM** **Constraining Inflation and Neutrino Mass with CLASS (15' + 5')**

**Speaker**  
Tobias Marriage

**3:30 - 3:50 PM**

**Cosmology and particle physics with POLARBEAR and Simons Array (15' + 5')**

**Speaker**  
MASAYA HASEGAWA

**3:50 - 4:10 PM** **Constraining inflation with dark matter (15' + 5')**

**Speaker**  
Layne Price

**4:10 - 4:30 PM**

**Probing the Electroweak Phase Transition with Colliders and Gravitational Waves (15' + 5')**

**Speaker**  
Andrew Long

4:30 PM

## Sat, August 6

9:00 AM

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

Session | Location: Chicago 10 | Convener: Jeffrey Filippini

9:00 – 9:15 AM **The South Pole Telescope (12' + 3')**

**Speaker**  
Bradford Benson

9:15 – 9:30 AM **Latest Results from SPTpol (12' + 3')**

**Speaker**  
Jason Henning

9:30 – 9:50 AM

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

**Speaker**  
Matthew Hasselfield

9:50 – 10:10 AM

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

**Speaker**  
Jeff McMahon

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

**Speaker**  
Jan Hamann

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

**Speaker**  
Prof. Jihn E. Kim

10:45 AM

11:15 AM

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

Session | Location: Chicago 7 | Convener: Shirley Ho

11:15 – 11:50 AM

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

**Speaker**  
Chris Pankow

11:50 AM – 12:25 PM

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

**Speaker**  
Lisa Barsotti

12:25 – 1:00 PM

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

1:00 PM

**Speaker**  
Scott Ransom