XIth International Conference on Interconnections between Particle Physics and Cosmology (PPC 2017)

hosted by
Texas A&M University - Corpus Christi

Corpus Christi Omni Hotel, Corpus Christi, Texas, USA
May 22-26, 2017

Agenda

All plenary talks take place in Room: Nueces A

Sunday, May 21, 06:00 - 08:00 pm - Registration - Omni Hotel, next to Nueces A room

Monday, May 22, 08:00 - 08:30 am - Registration - Omni Hotel, next to Nueces A room

Monday, May 22, 05:30 - 09:00 pm - Reception - Marker 37 and Laguna Madre Field Station - please bring non slippery shoes (transportation provided)

Tuesday, May 23, 07:00 pm - Public Lecture/Forum: Dream of Solving the Mysteries of the Universe with Nobel Laureates: Adam Riess & David Gross, TAMU-CC, University Center, Anchor Ballroom (transportation provided)

Thursday, May 25, 05:30 - 09:00 pm - Banquet - TAMU-CC Campus, University Center (transportation provided)

Monday, May 22, 2017

08:00 – 08:30  Registration

08:30 – 08:45  Kelly Quintanilla, Frank Pezold, Teruki Kamon & Barbara Szczerbinska: Welcome

Session I: Gravitational Waves  Chair: Barbara Szczerbinska

08:45 – 09:15  Michael Kesden: Astrophysical Gravitational Wave Sources
09:15 – 09:45  Alessandra Corsi: LIGO - Gravitational Wave Detection and Future Plans
09:45 – 10:15  Keisuke Fujii: Physics at LC

10:15 – 10:45  Coffee Break
Session II: Low Energy Precision Experiments

Chair: Keisuke Fujii

10:45 – 11:15 Ben Safdi: Searches for Axion-like Particles
11:15 – 11:45 Rouven Essig: Searches for sub-GeV Dark Matter and Dark Sectors
11:45 – 12:15 Francesca Calore: Theoretical Aspects of DM Indirect Searches

12:15 – 01:15 Lunch Break, Room: Nueces B

Session III: Early Universe Cosmology

Chair: Mustafa Amin

01:15 – 01:45 Bhupal Dev: Baryogenesis and Neutrino Mass - A Common Link and Experimental Signatures
01:45 – 02:15 Marina Migliaccio: PLANCK
02:15 – 02:45 Jens Chluba: CMB Spectral Distortions
02:45 – 03:15 Ivonne Zavala: String-DM/DE

03:15 – 03:30 Coffee Break

Session IV: Late Universe Cosmology I

Chair: Jennifer Marshall

03:30 – 04:00 Adam Riess: Review of Hubble Constant Measurements
04:00 – 04:30 Mark Vogelsberger: Structure Formation Numerical Aspects
04:30 – 05:00 Paul Shapiro: Reionization

06:00 – 09:00 Reception at the Marker 37.
The buses will be leaving from Omni Hotel at 05:20 PM
Tuesday, May 23, 2017

Session V: Late Universe Cosmology II
Chair: Paul Shapiro

08:15 – 08:45  Bob Kehoe: *Dark Energy Spectroscopy Instrument (DESI)*
08:45 – 09:15  Vasily Belukorov: *Near Field Cosmology*
09:15 – 09:45  Mike Boylan-Kolchin: *DM Simulations/Structure Formation*
09:45 – 10:15  Jennifer Marshall: *DES/Milky Way satellites overview*

10:15 – 10:30  Coffee Break

Session VI: Dark Matter I
Chair: Teruki Kamon

10:30 – 11:00  Paolo Zuccon: *AMS-02*
11:00 – 11:30  Troy Porter: *Fermi-LAT*
11:30 – 12:00  Pat Harding: *HAWC*

12:00 – 01:00  Lunch Break, Room: Nueces B

Session VII: Neutrinos I
Chair: Lisa Whitehead

01:00 – 01:30  Lisa Everett: *Neutrino Theory Overview*
01:30 – 02:00  Steve Elliott: *Neutrinoless double beta decay- overview*
02:00 – 02:30  Carsten Rott: *IceCube*
02:30 – 03:00  Yury Malyshkin: *Daya Bay/Juno*

03:00 – 03:20  Coffee Break

Session VIII: Contributed Parallel Sessions

Session VIII (A), Room: Nueces A
Chair: Pat Harding

03:20 – 03:40  Jason Brodsky: *PROSPECT*
03:40 – 04:00  Katharina von Sturm: *GERDA*
04:00 – 04:20  Will Flanagan: *Status of the MINER Experiment*
04:20 – 04:40  Jacques Pienaar: *XENON1T*
04:40 – 05:00  Will Flanagan: *Latest MINOS/MINOS+ Results*
05:00 – 05:20  Yury Malyshkin: *Sterile Neutrino Search at the Baksan Neutrino Observatory*
05:20 – 05:40  Tom Crawford: *South Pole Telescope*
**Session XVIII (B), Room: Nueces B**
Chair: James Halverson

03:20 – 03:40 Can Kilic: Multidimensional Methods for Discovery and Mass Measurement
03:40 – 04:00 Yuan-Pao Yang: Improving Mass Measurement in Cascade Decay with Voronoid Tessellation
04:00 – 04:20 Mei-Yu Wang: What Can We Learn about Dark Matter from Milky Way Dwarf Satellite Galaxies?
04:20 – 04:40 Andrew Pace: Inferring the Dark Matter Content of the Milky Way Satellites with Chemo-dynamical Modeling
04:40 – 05:00 Steven Clark: Planck Constraint on Relic Primordial Black Holes
05:00 – 05:20 Marcos Garcia Garcia: Stochastic Particle Production in the Early Universe
05:20 – 05:40 Joel Walker: A New Scale-Invariant Jet Clustering Algorithm for the Substructure Era

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**Session XVIII (C), Room: Copano**
Chair: JJ Cherry

03:20 – 03:40 Saki Khan: Dark Matter in SO(10) GUTs
03:40 – 04:00 Sheldon Campbell: Full-Sky Strategies for Dark Matter Indirect Detection
04:00 – 04:20 Chee Sheng Fong: Thermal Dark Matter and Leptogenesis
04:20 – 04:40 Cynthia Trendafilova: Secretly Asymmetric Dark Matter
04:40 – 05:00 Esteban Jimenez: The Influence of Dark Energy on the Expansion Rate of the Universe and its Effects on Dark Matter Relic Abundance
05:00 – 05:20 Emine Gurpinar: Search for Dark Matter and Large Extra Dimensions in the jets+MET Final State in Proton-Proton Collisions at $s = 13$
05:20 – 05:40 Nader Mirabolfathi: Directional Sensitivity with Single Electron Resolution Phonon Mediated Detectors

06:20 – 9:00 Public Talk by Adam Riess followed by Public Forum with David Gross and Adam Riess
The buses will be leaving from Omni Hotel at 06:20 PM
Wednesday, May 24, 2017

Session IX: Physics from Colliders I
Chair: Tao Han

08:30 – 09:00 Anthony Weidberg: DM Searches at ATLAS
09:00 – 09:30 Andreas Albert: DM Searches at CMS
09:30 – 10:00 Vivek Jain: Higgs at ATLAS
10:00 – 10:30 Paul Padley: Higgs at CMS

10:30 – 11:00 Coffee Break

Session X: Physics from Colliders II
Chair: Anthony Weidberg

11:00 – 11:30 Tony Gherghetta: Composite Higgs
11:30 – 12:00 Tao Han: Physics with 100 TeV pp Collider
12:00 – 12:30 Norbert Neumeister: Exotic Physics Searches at the LHC

12:30 – 01:30 Lunch Break, Room: Nueces B

Session XI: Physics from Colliders III
Chair: Paul Padley

01:30 – 02:00 Jessie Shelton: Long-lived Particles at LHC)
02:00 – 02:30 Frank Geurts: Heavy Ion Physics

02:30 – Evening Explore Corpus Christi
Thursday, May 25, 2017

Session XII: Dark Matter II  Chair: Can Kilic

08:30 – 09:00  Adam Martin: Direct Detection - Models with Distinctive Direct Detection Signatures
09:00 – 09:30  Peter Sorensen: Direct Detection - Experimental Update
09:30 – 10:00  JJ Cherry: 3.5 keV X-ray Anomaly
10:00 – 10:30  Michele Cicoli: String Inflation, DR, Non-thermal DM

10:30 – 10:50  Coffee Break

Session XIII: Dark Matter III  Chair: Louis Strigari

10:50 – 11:20  Peisi Huang: Dark Matter Phenomenology
11:20 – 11:50  Sherry Suyu: Lensing
11:50 – 12:20  Kevork Abazajian: Galactic Center Excess

12:20 – 01:20  Lunch Break, Room: Nueces B

Session XIV: Dark Matter IV  Chair: Michele Cicoli

01:20 – 01:50  Robert Webb: LUX/LZ
01:50 – 02:20  Changbo Fu: PANDAX
02:20 – 02:50  Rakshya Khatiwada: ADMX
02:50 – 03:20  Andrew Kubik: SuperCDMS at SNOLAB

03:20 – 03:40  Coffee Break

Session XV: Neutrinos II  Chair: David Tedeschi

03:40 – 04:10  Pierce Weatherly: SuperK
04:10 – 04:40  Michel Gonin: T2K
04:40 – 05:10  Juan Estrada: CONNIE

06:00 – 09:00  Conference Banquet, TAMU-CC Campus, University Center, Anchor Ballroom
               The buses will be leaving from Omni Hotel at **05:30 PM**
Friday, May 26, 2017

Session XVI: Neutrinos III  
Chair: Kaladi Babu
08:30 – 09:00 Lisa Whitehead: Physics with DUNE Overview
09:00 – 09:30 Patrick Huber: Neutrino Phenomenology
09:30 – 10:00 Carlo Giunti: Sterile Neutrinos
10:00 – 10:30 David Tedeschi: Majorana Demonstrator

10:30 – 11:00 Coffee Break

Session XVII: Exotic Signatures, Unification and Hadron Collider Physics I  
Chair: Joe Lykken
11:00 – 11:30 James Halverson: Grand Unified Theories – String Phenomenology Approach
11:30 – 12:00 Tianjun Li: Grand Unified Theories
12:00 – 12:30 Durmus Demir: Curved Equivalence Principle and the Hierarchy Problem

12:30 – 01:30 Lunch Break, Room: Nueces B

Session XVIII: Exotic Signatures, Unification and Hadron Collider Physics II  
Chair: Tianjun Li
01:30 – 02:00 Pavel Fileviez Perez: New Physics: B and L Doorways
02:00 – 02:30 Joe Lykken: Physics at Hadron Colliders
02:30 – 03:00 Xiao-Gang He: B Physics Anomalies
03:00 – 03:30 Flip Tanedo: Models, Exotic Signatures and Proposed Searches

03:30 – 04:00 Coffee Break

Session XIX: Summary Session  
Chair: Barbara Szczerbinska
04:00 – 04:45 Gordon Kane: Particle Physics Summary Talk
04:45 – 05:30 Dan Hooper: Cosmology Summary Talk
05:30 Adjourn