



<http://kicp-workshops.uchicago.edu/IDM2012/>

CONFERENCE PROGRAM



<http://kicp.uchicago.edu/>



<http://www.nsf.gov/>



THE UNIVERSITY OF
CHICAGO

<http://www.uchicago.edu/>



<http://www.fnal.gov/>

International Advisory Committee

Daniel Akerib
Case Western Reserve University,
Cleveland, USA

Elena Aprile
Columbia University, USA

Rita Bernabei
Universita degli Studi di Roma, Italy

Gianfranco Bertone
University of Amsterdam

Joakim Edsjo
Oskar Klein Centre / Stockholm
University

Katherine Freese
University of Michigan, USA

Richard Gaitskell
Brown University, USA

Gilles Gerbier
IRFU/ CEA Saclay, France

Anne Green
University of Nottingham, UK

Karsten Jedamzik
Universite de Montpellier, France

Xiangdong Ji
University of Maryland, USA

Lawrence Krauss
Arizona State University, USA

Vitaly Kudryavtsev
University of Sheffield

Reina Maruyama
University of Wisconsin-Madison

Leszek Roszkowski
University of Sheffield, UK

Bernard Sadoulet
University of California, Berkeley, USA

Pierre Salati
University of California, Berkeley, USA

Daniel Santos
LPSC/UJF/CNRS

Pierre Sikivie
University of Florida, USA

Daniel Snowden-Ifft
Occidental College

Neil Spooner
University of Sheffield, UK

Max Tegmark
Kavli Institute for Astrophysics & Space
Research at MIT, USA

Karl van Bibber
Naval Postgraduate School Monterey,
USA

Local Organizing Committee

Daniel Bauer
Fermi National Accelerator Laboratory

Matthew Buckley
Fermi National Accelerator Laboratory

Juan Collar
Kavli Institute for Cosmological Physics

Scott Dodelson
Fermi National Accelerator Laboratory

Aimee Giles
Kavli Institute for Cosmological Physics

Jeter Hall
Fermi National Accelerator Laboratory

Dan Hooper
Fermi National Accelerator Laboratory

Lauren Hsu
Fermi National Accelerator Laboratory

Rocky Kolb
University of Chicago/KICP

Angela Olinto
Kavli Institute for Cosmological Physics

Helen Pates
Kavli Institute for Cosmological Physics

Ted Ressel
Kavli Institute for Cosmological Physics

Douglas Spolyar
Fermi National Accelerator Laboratory

Lian-Tao Wang
Kavli Institute for Cosmological Physics

PLENARY SESSIONS

July 23-27, 2012 @ Holiday Inn Mart Plaza, Chicago, IL

Monday - July 23, 2012

8:30 AM - 9:00 AM *CONTINENTAL BREAKFAST*
(Wolf Point Reception area, 15th floor)

MORNING PLENARY SESSION I

Convener: Dan Hooper
(Wolf Point Ballroom, 15th floor)

9:00 AM - 9:10 AM *BRIEF INTRODUCTION*

9:10 AM - 9:35 AM **Priscilla B Cushman**, University of Minnesota
Plenary Talk: SuperCDMS: Progress and Future Directions

9:35 AM - 10:00 AM **Antonio Melgarejo**, Columbia University
Plenary Talk: New results from XENON100

10:00 AM - 10:25 AM **Klaus Eitel**, Karlsruhe Institute of Technology
Plenary Talk: The EDELWEISS dark matter search

10:25 AM - 11:00 AM *COFFEE BREAK*
(Wolf Point Reception area, 15th floor)

MORNING PLENARY SESSION II

Convener: Daniel Bauer
(Wolf Point Ballroom, 15th floor)

11:00 AM - 11:25 AM **Joerg Jaeckel**, IPPP/Durham University
Plenary Talk: Axions, WISPs and other stuff

11:25 AM - 11:50 AM **Aaron S Chou**, Fermilab
Plenary Talk: The Hunt for axions

11:50 AM - 12:15 PM **Leslie J Rosenberg**, University of Washington
Plenary Talk: Status of ADMX

12:15 PM - 2:00 PM *LUNCH*

2:00 PM - 2:15 PM *DESSERT & COFFEE*
(Wolf Point Reception area, 15th floor)

AFTERNOON PARALLEL SESSIONS

- * **Direct Detection I**, *Convener: Christopher Savage* (Wolf Point Ballroom, 15th floor)
- * **Indirect Detection I**, *Convener: Paolo Gondolo* (Western Stage room, 14th floor)

Tuesday - July 24, 2012

- 8:30 AM - 9:00 AM *CONTINENTAL BREAKFAST*
(Wolf Point Reception area, 15th floor)
- MORNING PLENARY SESSION I**
Convener: Carsten Krauss
(Wolf Point Ballroom, 15th floor)
- 9:00 AM - 9:25 AM **Riccardo Cerulli**, INFN-LNGS
Plenary Talk: Dark matter signal in DAMA/LIBRA
- 9:25 AM - 9:50 AM **Christian Strandhagen**, Kepler Center for Astro and Particle Physics Tuebingen University
Plenary Talk: The CRESST-II experiment - status update
- 9:50 AM - 10:15 AM **Juan Collar**, Kavli Institute for Cosmological Physics
Plenary Talk: New results from CoGeNT
- 10:15 AM - 10:45 AM *COFFEE BREAK*
(Wolf Point Reception area, 15th floor)
- MORNING PLENARY SESSION II**
Convener: Douglas Finkbeiner
(Wolf Point Ballroom, 15th floor)
- 10:45 AM - 11:10 AM **Joachim Kopp**, Fermilab
Plenary Talk: Direct detection of light WIMPs
- 11:10 AM - 11:35 AM **Jennifer Siegal-Gaskins**, Caltech
Plenary Talk: Dark matter searches with Fermi
- 11:35 AM - 12:00 PM **James Buckley**, Washington University
Plenary Talk: Dark matter searches with ACTs
- 12:00 PM - 12:25 PM **Stefano Profumo**, University of California, Santa Cruz
Plenary Talk: Fermi from a theorist's perspective
- 12:25 PM - 2:00 PM *LUNCH*
- 2:00 PM - 2:15 PM *DESSERT & COFFEE*
(Wolf Point Reception area, 15th floor)
- 2:15 PM - 6:00 PM **AFTERNOON PARALLEL SESSIONS**
* **Direct Detection II**, *Convener: Lauren Hsu* (Wolf Point Ballroom, 15th floor)
* **Indirect Detection II**, *Convener: James Buckley* (Western Stage room, 14th floor)
* **Particle Physics**, *Convener: Stefano Profumo* (Steamboat room, 14th floor)

Wednesday - July 25, 2012

- 8:30 AM - 9:00 AM *CONTINENTAL BREAKFAST*
(Wolf Point Reception area, 15th floor)
- MORNING PLENARY SESSION I**
Convener: Andrey Kravtsov
(Wolf Point Ballroom, 15th floor)
- 9:00 AM - 9:25 AM **Carlos S Frenk**, Durham University
Plenary Talk: Status of dark matter simulations
- 9:25 AM - 9:50 AM **Michael Kuhlen**, Theoretical Astrophysics Center, UC Berkeley
Plenary Talk: Status of dark matter simulations
- 9:50 AM - 10:15 AM **Daniel P. Snowden-Ifft**, Occidental College
Plenary Talk: Overview of directional dark matter detectors
- 10:15 AM - 10:45 AM *COFFEE BREAK*
(Wolf Point Reception area, 15th floor)
- MORNING PLENARY SESSION II**
Convener: Hans Kraus
(Wolf Point Ballroom, 15th floor)
- 10:45 AM - 11:10 AM **Carsten B Krauss**, University of Alberta
Plenary Talk: Constraints on low-mass WIMPs from PICASSO
- 11:10 AM - 11:35 AM **Yoichiro Suzuki**, Kamioka Observatory, ICRR, U. of Tokyo
Plenary Talk: The XMASS Experiment
- 11:35 AM - 12:00 PM **Annika Peter**, UC Irvine
Plenary Talk: Astrophysical uncertainties in dark matter detection
- 12:00 PM - 12:25 PM **Kevoork N. Abazajian**, University of California, Irvine
Plenary Talk: Status of sterile neutrino dark matter
- 12:25 PM - 2:00 PM *LUNCH*
- 2:00 PM - 2:15 PM *DESSERT & COFFEE*
(Wolf Point Reception area, 15th floor)
- 2:15 PM - 6:00 PM **AFTERNOON PARALLEL SESSIONS**
* **Direct Detection III**, *Convener: Vitaly Kudryavtsev* (Wolf Point Ballroom, 15th floor)
* **Particle Physics/Direct Detection I**, *Convener: Matthew Buckley* (Western Stage room, 14th floor)

Thursday - July 26, 2012

- 8:30 AM - 9:00 AM *CONTINENTAL BREAKFAST*
(Wolf Point Reception area, 15th floor)
- MORNING PLENARY SESSION I**
Convener: Lars Bergstrom
(Wolf Point Ballroom, 15th floor)
- 9:00 AM - 9:25 AM **Tim M.P. Tait**, University of California, Irvine
Plenary Talk: Dark matter searches at the LHC (theory)
- 9:25 AM - 9:50 AM **Daniel Whiteson**, UC Irvine
Plenary Talk: Dark Matter searches at the LHC (experiment)
- 9:50 AM - 10:15 AM **Matthew Reece**, Harvard University
Plenary Talk: Supersymmetry: Where Do We Stand?
- 10:15 AM - 10:45 AM *COFFEE BREAK*
(Wolf Point Reception area, 15th floor)
- "Meet and Greet" the editors of the Physics of the Dark Universe journal (Elsevier Table, Wolf Point Registration Area, 15th floor). Editors will also be available from 2:15 PM - 2:45 PM.*
- MORNING PLENARY SESSION II**
Convener: Daniel Snowden-Ifft
(Wolf Point Ballroom, 15th floor)
- 10:45 AM - 11:10 AM **Karen Gibson**, Case Western Reserve University
Plenary Talk: The LUX Experiment
- 11:10 AM - 11:35 AM **Richard N Saldanha**, LNGS, Italy
Plenary Talk: Status of Darkside
- 11:35 AM - 12:00 PM **Andrew Hime**, Los Alamos National Laboratory
Plenary Talk: CLEAN Detection of Dark Matter
- 12:00 PM - 2:00 PM *LUNCH*
- 2:00 PM - 2:15 PM *DESSERT & COFFEE*
(Wolf Point Reception area, 15th floor)
- 2:15 PM - 5:35 PM **AFTERNOON PARALLEL SESSIONS**
* **Direct Detection IV**, *Convener: Viktor Zacek* (Wolf Point Ballroom, 15th floor)
* **Indirect Detection III**, *Convener: Douglas Spolyar* (Western Stage room, 14th floor)
- DINNER**
at the Adler Planetarium, 1300 South Lake Shore Drive, Chicago, IL 60605
- 5:45 PM *SHUTTLES BOARD*
Shuttle buses will be parked just East of the Holiday Inn Mart Plaza entrance on Orleans Street

6:00 PM	<i>SHUTTLES DEPART</i> for the Adler Planetarium
6:30 PM - 7:30 PM	<i>HORS D'OEUVRES</i>
7:30 PM - 9:30 PM	<i>DINNER</i>
10:00 PM	<i>SHUTTLES BOARD</i> in front of the Adler Planetarium main entrance
10:15 PM	<i>SHUTTLES DEPART & RETURN</i> to the Holiday Inn Mart Plaza

Friday - July 27, 2012

- 8:30 AM - 9:00 AM *CONTINENTAL BREAKFAST*
(Wolf Point Reception area, 15th floor)
- 9:00 AM - 12:00 PM **MORNING PARALLEL SESSIONS**
* **Particle Physics/Direct Detection II**, *Convener: Joakim Edsjo* (Wolf Point Ballroom, 15th floor)
* **Structure and Stars**, *Convener: Carlos Frenk* (Steamboat room, 14th floor)
* **Indirect Detection IV**, *Convener: Mariangela Lisanti* (Western Stage room, 14th floor)
- 12:00 PM - 1:45 PM *LUNCH*
- 1:45 PM - 2:00 PM *DESSERT & COFFEE*
(Wolf Point Reception area, 15th floor)
- AFTERNOON PLENARY SESSION I**
Convener: Tim Tait
(Wolf Point Ballroom, 15th floor)
- 2:00 PM - 2:25 PM **Douglas P Finkbeiner**, Harvard University
Plenary Talk: Fermi jets and the 130 GeV line
- 2:25 PM - 2:50 PM **Andrei Kounine**, Massachusetts Institute of Technology
Plenary Talk: Status of AMS-02
- 2:50 PM - 3:15 PM **Marco Taoso**, University of British Columbia
Plenary Talk: Dark matter with radio telescopes
- 3:15 PM - 3:45 PM *COFFEE BREAK*
(Wolf Point Reception area, 15th floor)
- AFTERNOON PLENARY SESSION II**
Convener: Rocky Kolb
(Wolf Point Ballroom, 15th floor)
- 3:45 PM - 4:10 PM **Carsten Rott**, Ohio State University / CCAPP
Plenary Talk: Latest Results from IceCube
- 4:10 PM - 4:35 PM **Gianfranco Bertone**, University of Amsterdam
Plenary Talk: Summary Talk

PARALLEL SESSIONS

July 23-27, 2012 @ Holiday Inn Mart Plaza, Chicago, IL

Monday - July 23, 2012**DIRECT DETECTION I***Convener: Christopher Savage*

(Wolf Point Ballroom, 15th floor)

- 2:15 PM - 2:35 PM **Daniel Brandt**, KIPAC, SLAC National Accelerator Lab, Stanford University
Understanding the Physics of SuperCDMS SNOLAB Detectors
- 2:40 PM - 3:00 PM **Hassan Chagani**, University of Minnesota
SuperCDMS-SNOLAB: Road to 100 mm Germanium Detectors
- 3:05 PM - 3:25 PM **Manungu Kiveni**, Syracuse University
Reanalysis of CDMS II data
- 3:30 PM - 3:50 PM **Nicole E Fields**, University of Chicago
A low-energy analysis of CDMS data
- 3:55 PM - 4:15 PM **Scott A Hertel**, MIT
Search for Annual Modulation in Low-Energy CDMS-II Data
- 4:20 PM - 4:40 PM **Vitaly Kudryavtsev**, University of Sheffield
Background studies for the EDELWEISS dark matter experiment
- 4:45 PM - 5:05 PM **Veronique Sanglard**, Institut de Physique Nucleaire de Lyon
EDELWEISS-II WIMP search at low energy
- 5:10 PM - 5:30 PM **Silva Scorza**, Southern Methodist University
SuperCDMS-SNOLAB - an active neutron veto shield design
- 5:35 PM - 5:55 PM **Hans Kraus**, University of Oxford
EURECA

INDIRECT DETECTION I*Convener: Paolo Gondolo*

(Western Stage room, 14th floor)

- 2:15 PM - 2:35 PM **Matthias Danninger**, Stockholm University
Search for Dark Matter Captured in the Sun with the IceCube Neutrino Observatory
- 2:40 PM - 3:00 PM **Sofia Sivertsson**, KTH / Stockholm University
WIMP diffusion in the Solar System and the neutrino signal from the Sun and the Earth
- 3:05 PM - 3:25 PM **Joakim Edsjo**, Oskar Klein Centre / Stockholm University
Neutrino searches for dark matter
- 3:30 PM - 3:50 PM **Jonathan A Miller**, Vrije Universiteit Brussel
Search for Secluded Dark Matter in the Sun using the IceCube Neutrino Observatory
- 3:55 PM - 4:15 PM **Basudeb Dasgupta**, CCAPP, Ohio State University
Probing DM in Galaxy Clusters using Neutrino Telescopes

Tuesday - July 24, 2012

DIRECT DETECTION II*Convener: Lauren Hsu*

(Wolf Point Ballroom, 15th floor)

- 2:15 PM - 2:35 PM **Kimberly J Palladino**, MIT
A discussion of the DEAP-3600 calibration systems.
- 2:40 PM - 3:00 PM **Mark Boulay**, Queen's University
DEAP-3600 Dark Matter Search at SNOLAB
- 3:05 PM - 3:25 PM **Akira Hitachi**, Kochi Medical School
The electronic LET for slow ions in dark matter detector media
- 3:30 PM - 3:50 PM **Dinesh Loomba**, University of New Mexico
The DRIFT Dark Matter Search
- 3:55 PM - 4:15 PM **Daniel Santos**, LPSC/UJF/CNRS
Directional Detection of DM with MIMAC
- 4:20 PM - 4:40 PM **Kentaro Miuchi**, Kobe University
NEWAGE
- 4:45 PM - 5:05 PM **Shawn W Henderson**, Massachusetts Institute of Technology
Surface Commissioning of the DMTPC 4-Shooter Directional Dark Matter Detector Prototype
- 5:10 PM - 5:30 PM **Tatsuhhiro Naka**, Nagoya University
Directional Dark Matter Search with Nuclear Emulsion
- 5:35 PM - 5:55 PM **Steven K Linden**, Boston University
Status Report on the MiniCLEAN Experiment

INDIRECT DETECTION II*Convener: James Buckley*

(Western Stage room, 14th floor)

- 2:15 PM - 2:35 PM **Lars Bergstrom**, Stockholm University
Spectral gamma-ray signatures in dark matter detection - a review
- 2:40 PM - 3:00 PM **Timothy Linden**, UC - Santa Cruz
Indirect Detection of Dark Matter at the Galactic Center
- 3:05 PM - 3:25 PM **Christoph Weniger**, Max Planck Institute for Physics, Munich
A tentative gamma-ray line from dark matter annihilation at the Fermi Large Area Telescope
- 3:30 PM - 3:50 PM **Gabrijela Zaharijas**, ICTP, Trieste
Constraints on dark matter annihilation and decay in the Milky Way halo
- 3:55 PM - 4:15 PM **Meng Su**, Harvard University/MIT
Evidence for Gamma-ray Jets in Our Milky Way
- 4:20 PM - 4:40 PM **Emmanuel Moulin**, CEA Saclay, IRFU
Indirect dark matter searches with current imaging atmospheric Cherenkov telescopes
- 4:45 PM - 5:05 PM **Emmanuel Moulin**, CEA Saclay, IRFU
Search for Dark Matter Annihilation Signals from the Fornax Galaxy Cluster with H.E.S.S.
- 5:10 PM - 5:30 PM **Pat Scott**, McGill University
Cosmology with ultracompact minihalos

PARTICLE PHYSICS*Convener: Stefano Profumo*

(Steamboat room, 14th floor)

- 2:15 PM - 2:35 PM **Jordan Damgov**, Texas Tech University
Recent results from a search for Dark Matter production in the CMS experiment
- 2:40 PM - 3:00 PM **Sara Rydbeck**, DESY
The inert doublet model and the role of multileptons at the LHC

- 3:05 PM - 3:25 PM **Stefano Scopel**, Sogang University Korea
Phenomenology of light neutralinos in view of recent results at the CERN Large Hadron Collider
- 3:30 PM - 3:50 PM **Jussi Virkajarvi**, CP3-Origins & DIAS, University of Southern Denmark
Invisible Higgs and Dark Matter
- 3:55 PM - 4:15 PM **Randy C Cotta**, SLAC/Stanford
Experimental Bounds on Chi-Chi-V-V
- 4:20 PM - 4:40 PM **Jaime Ruz Armendariz**, Lawrence Livermore National Laboratory
Constraints on the axion-electron coupling for the non-hadronic models with CAST
- 4:45 PM - 5:05 PM **Julia K Vogel**, Lawrence Livermore National Laboratory
The International Axion Observatory (IAXO)
- 5:10 PM - 5:30 PM **Qiaoli Yang**, University of Florida
Axion BEC: a model beyond CDM

Wednesday - July 25, 2012

DIRECT DETECTION III*Convener: Vitaly Kudryavtsev*

(Wolf Point Ballroom, 15th floor)

- 2:15 PM - 2:35 PM **Ran Budnik**, Columbia university
The XENONIT experiment
- 2:40 PM - 3:00 PM **Carmen Carmona-Benitez**, Case Western Reserve University
LUX detector, Installation and Operation
- 3:05 PM - 3:25 PM **Carlos H Faham**, Brown University
Alpha tomography, calibrations and backgrounds in the LUX dark matter experiment
- 3:30 PM - 3:50 PM **Matthew M Szydagis**, UC Davis
Calibrations of the LUX Detector on the Surface
- 3:55 PM - 4:15 PM **Sean M Paling**, Boulby Underground Science Facility
Boulby Deep Underground Science Facility: Status and Future Plans
- 4:20 PM - 4:40 PM **Tom Shutt**, Case Western Reserve University
The LZ Experiment
- 4:45 PM - 5:05 PM **David Malling**, Brown University
Background Characterization and Rejection in the LZ Detector
- 5:10 PM - 5:30 PM **Katsushi Arisaka**, UCLA
MAX and XAX: Dark matter and neutrino observatory based on multi-ton liquid xenon and liquid argon

PARTICLE PHYSICS/DIRECT DETECTION I*Convener: Matthew Buckley*

(Western Stage room, 14th floor)

- 2:15 PM - 2:35 PM **Nicolas Bernal**, University of Bonn, Germany
Phenomenology of WIMPy baryogenesis models
- 2:40 PM - 3:00 PM **Paolo Gondolo**, University of Utah
Phenomenology of light WIMPs
- 3:05 PM - 3:25 PM **Andreas Goudelis**, DESY - Hamburg
The Inert Doublet Model of Dark Matter Beyond Tree-level
- 3:30 PM - 3:50 PM **Jonathan Kozaczuk**, UC Santa Cruz
Exploring the Dark Matter - Electroweak Baryogenesis Connection in Supersymmetry
- 3:55 PM - 4:15 PM **Jong-Chul Park**, Korea Institute for Advanced Study
Assisted freeze-out
- 4:20 PM - 4:40 PM **Osamu Seto**, Hokkai-Gakuen University
Initially asymmetric dark matter
- 4:45 PM - 5:05 PM **Seodong Shin**, Seoul National University
Dark matter in the PQMSSM in anomaly mediation
- 5:10 PM - 5:30 PM **Zuowei Liu**, McGill University
Millicharged Atomic Dark Matter
- 5:35 PM - 5:55 PM **Wei Xue**, Physics Department, McGill University
An optimistic CoGeNT analysis

Thursday - July 26, 2012

DIRECT DETECTION IV*Convener: Viktor Zacek*

(Wolf Point Ballroom, 15th floor)

- 2:15 PM - 2:35 PM **Michael B. Crisler**, Fermilab
Dark Matter Search Results from the COUPP-4kg Bubble Chamber at SNOLAB
- 2:40 PM - 3:00 PM **Hugh Lippincott**, Fermilab
COUPP Iodine Recoil Threshold Experiment
- 3:05 PM - 3:25 PM **Alan E Robinson**, University of Chicago
COUPP Carbon and Fluorine Recoil Thresholds
- 3:30 PM - 3:50 PM **Andrew Sonnenschein**, Fermilab
COUPP-60
- 3:55 PM - 4:15 PM **Eric Vazquez-Jauregui**, SNOLAB
COUPP500: A 500kg CF3I Bubble Chamber
- 4:20 PM - 4:40 PM **Juan Estrada**, Fermilab
Direct Dark Matter Search with Charge Couple Devices
- 4:45 PM - 5:05 PM **Ritoban Basu Thakur**, Fermilab / UIUC
The CDMSlite experiment
- 5:10 PM - 5:30 PM **Maria Luisa Sarsa**, University of Zaragoza
Background model for a NaI(Tl) detector in the frame of the ANAIS experiment

INDIRECT DETECTION III*Convener: Douglas Spolyar*

(Western Stage room, 14th floor)

- 2:15 PM - 2:35 PM **Alex Geringer-Sameth**, Brown University
Results of continuum and line WIMP searches in dwarf galaxies with Fermi
- 2:40 PM - 3:00 PM **Ilias Cholis**, SISSA (Scuola Internazionale Superiore di Studi Avanzati)
Extracting limits on dark matter annihilation from dwarf spheroidal galaxies
- 3:05 PM - 3:25 PM **Alexander A. Kirillov**, National Research Nuclear University "MEPhI"
Small scale dark matter clumps and its gamma ray signals
- 3:30 PM - 3:50 PM **Hannes-S. Zechlin**, University of Hamburg, Germany
Dark matter subhalos: the observational challenge
- 3:55 PM - 4:15 PM **Ranjan Laha**, CCAPP & Dept. of Physics, Ohio State University
Radio Constraints on dark matter induced Galactic Center gamma-ray lines
- 4:20 PM - 4:40 PM **Alexander V Belikov**, Institut d'Astrophysique de Paris
Testing the composition of the of gamma rays from the galactic center and the cosmic ray electrons at TeV scale
- 4:45 PM - 5:05 PM **Mariangela Lisanti**, Princeton Center for Theoretical Science
Illuminating the 130 GeV Line with Continuum Photons
- 5:10 PM - 5:30 PM **Philip von Doetinchem**, UC Berkeley, Space Sciences Laboratory
The General Antiparticle Spectrometer (GAPS) - Hunt for dark matter using low energy antideuterons

Friday - July 27, 2012

PARTICLE PHYSICS/DIRECT DETECTION II*Convener: Joakim Edsjo*

(Wolf Point Ballroom, 15th floor)

- 9:00 AM - 9:20 AM **Chris Purcell**, University of Pittsburgh
Dark Matter Direct Search Rates in Simulations of the Milky Way and Sagittarius Stream
- 9:25 AM - 9:45 AM **Richard Hill**, University of Chicago
Universal behavior in the scattering of heavy, weakly interacting dark matter on nuclear targets
- 9:50 AM - 10:10 AM **Chung-Lin Shan**, Academia Sinica
Model-Independent Data Analysis in Direct Searches for Inelastic Dark Matter
- 10:15 AM - 10:35 AM **Fabio Iocco**, Oskar Klein Center for CosmoParticle Physics
Dark Matter distribution in the Milky Way: microlensing and dynamical constraints
- 10:40 AM - 11:00 AM **Bibhushan Shakya**, Cornell University
Direct Detection Implications on Supersymmetry Naturalness
- 11:05 AM - 11:25 AM **Miguel Pato**, Technical University Munich
Combining direct detection and antiprotons to constrain dark matter models

STRUCTURE AND STARS*Convener: Carlos Frenk*

(Steamboat room, 14th floor)

- 9:00 AM - 9:20 AM **Andrew Zentner**, University of Pittsburgh
Asymmetric Dark Matter may Alter the Conditions for Stardom
- 9:25 AM - 9:45 AM **Mei-Yu Wang**, University of Pittsburgh
Constraints on Decaying Dark Matter from Large-Scale Structure
- 9:50 AM - 10:10 AM **Donghai Zhao**, Shanghai Astronomical Observatory
The universal mass-concentration relation for cold, warm and hot dark matter halos
- 10:15 AM - 10:35 AM **Matthew R Becker**, University of Chicago
Extreme Scale Weak Lensing Simulations for Large Area Sky Surveys
- 10:40 AM - 11:00 AM **Andrey Kravtsov**, University of Chicago
Evolution of halo mass and cluster observable-mass scaling relations

INDIRECT DETECTION IV*Convener: Mariangela Lisanti*

(Western Stage room, 14th floor)

- 9:00 AM - 9:20 AM **Alessandro Cuoco**, Oskar Kein Center for CosmoParticle Physics
Diffuse Gamma-ray Background anisotropies and Dark Matter
- 9:25 AM - 9:45 AM **German A. Gomez-Vargas**, Universidad Autonoma de Madrid / IFT UAM-CSIC / INFN Roma Tor Vergata
Dark matter constraints from the anisotropies of the gamma-ray background measured by the Fermi-LAT
- 9:50 AM - 10:10 AM **Andrew W Smith**, University of Utah
The VERITAS Indirect Dark Matter Detection Program
- 10:15 AM - 10:35 AM **David Tran**, University of Minnesota
Cosmic-ray and gamma-ray constraints on dark matter stability