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Fermi National Accelerator Laboratory

Lian-Tao Wang
Kavli Institute for Cosmological Physics

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| Monday - July 23, 2012 |
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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

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| Tuesday - July 24, 2012 |
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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

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| Wednesday - July 25, 2012 |
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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

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| Thursday - July 26, 2012 |
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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