

Dark Sectors Workshop

Report of Contributions

Contribution ID: 1

Type: **not specified**

Workshop Logistics (Kavli Aud.)

Thursday, 28 April 2016 08:30 (15 minutes)

Summary

Presenter: JAROS, John (SLAC)

Contribution ID: 2

Type: **not specified**

Welcome (Kavli Aud.)

Thursday, 28 April 2016 08:45 (15 minutes)

Summary

Presenter: HEWETT, JoAnne (SLAC)

Contribution ID: 3

Type: **not specified**

Theory & Dark Photon WG Primer (Kavli Aud.)

Thursday, 28 April 2016 09:00 (45 minutes)

Summary

Presenter: TORO, Natalia (SLAC)

Contribution ID: 4

Type: **not specified**

Dark Matter at Accelerators WG Primer (Kavli Aud.)

Thursday, 28 April 2016 10:15 (45 minutes)

Summary

Presenter: SCHUSTER, Philip

Contribution ID: 5

Type: **not specified**

Direct Detection WG Primer

Thursday, 28 April 2016 11:00 (45 minutes)

Presenter: ESSIG, Rouven

Contribution ID: 6

Type: **not specified**

WG Goals & Challenge Questions

Thursday, 28 April 2016 11:45 (15 minutes)

Summary

Presenter: TORO, Natalia (SLAC)

Contribution ID: 7

Type: **not specified**

SHIP

Thursday, 28 April 2016 13:30 (30 minutes)

Presenter: LANFRANCHI, Gaia (Istituto Nazionale Fisica Nucleare Frascati (IT))

Session Classification: Visible Dark Photon Searches

Contribution ID: 8

Type: **not specified**

SeaQuest

Thursday, 28 April 2016 14:00 (30 minutes)

Presenter: LIU, Ming (Los Alamos National Laboratory)

Session Classification: Visible Dark Photon Searches

Contribution ID: 9

Type: **not specified**

MiniBoone Present

Thursday, 28 April 2016 13:30 (20 minutes)

Presenter: TAYLOE, Rex

Session Classification: Dark Matter at Accelerators

Contribution ID: **10**

Type: **not specified**

SBN Future

Thursday, 28 April 2016 13:50 (20 minutes)

Presenter: COOPER, Robert

Session Classification: Dark Matter at Accelerators

Contribution ID: **11**

Type: **not specified**

Daedelus Theory

Thursday, 28 April 2016 14:10 (20 minutes)

Summary

Presenter: KAHN, Yoni

Session Classification: Dark Matter at Accelerators

Contribution ID: 12

Type: **not specified**

Discussion and Challenge Questions

Thursday, 28 April 2016 14:30 (30 minutes)

Session Classification: Dark Matter at Accelerators

Contribution ID: 13

Type: **not specified**

DUNE/LBNF Experiment

Thursday, 28 April 2016 16:30 (20 minutes)

Presenter: CHATTERJEE, Animesh

Session Classification: Dark Matter at Accelerators

Contribution ID: 14

Type: **not specified**

DUNE/LBNF Theory - I

Thursday, 28 April 2016 16:50 (15 minutes)

Presenter: DOBRESCU, Bogdan

Session Classification: Dark Matter at Accelerators

Contribution ID: 15

Type: **not specified**

DUNE/LBNF Theory - II

Thursday, 28 April 2016 17:05 (15 minutes)

Presenter: RITZ, Adam

Session Classification: Dark Matter at Accelerators

Contribution ID: 16

Type: **not specified**

Dark Matter at SeaQuest

Thursday, 28 April 2016 17:20 (20 minutes)

Summary

Presenter: GORI, Stefania

Session Classification: Dark Matter at Accelerators

Contribution ID: 17

Type: **not specified**

Discussion and Challenge Questions

Thursday, 28 April 2016 17:40 (20 minutes)

Session Classification: Dark Matter at Accelerators

Contribution ID: **18**

Type: **not specified**

Comments about Missing Momentum Experiments

Friday, 29 April 2016 15:35 (5 minutes)

Presenter: TORO, Natalia (SLAC)

Session Classification: Joint Visible/Accelerators Session

Contribution ID: **19**

Type: **not specified**

BDX

Friday, 29 April 2016 10:00 (15 minutes)

Presenter: CELENTANO, Andrea

Session Classification: Dark Matter at Accelerators

Contribution ID: **20**

Type: **not specified**

DRIFT at BDX

Friday, 29 April 2016 10:15 (15 minutes)

Presenter: SNOWDEN-IFFT, Daniel

Session Classification: Dark Matter at Accelerators

Contribution ID: 21

Type: **not specified**

BDX at SLAC

Friday, 29 April 2016 10:30 (20 minutes)

Presenters: FIELD, Clive; SCHUSTER, Philip

Session Classification: Dark Matter at Accelerators

Contribution ID: 22

Type: **not specified**

Dark Light

Friday, 29 April 2016 10:50 (20 minutes)

Presenter: CORLISS, Ross

Session Classification: Dark Matter at Accelerators

Contribution ID: 23

Type: **not specified**

Discussion and Challenge Questions

Friday, 29 April 2016 11:10 (50 minutes)

Session Classification: Dark Matter at Accelerators

Contribution ID: 24

Type: **not specified**

LDMX – Light Dark Matter eXperiment

Friday, 29 April 2016 15:40 (20 minutes)

Presenter: MANS, Jeremy (University of Minnesota (US))

Session Classification: Joint Visible/Accelerators Session

Contribution ID: 25

Type: **not specified**

NA64

Friday, 29 April 2016 15:15 (20 minutes)

Presenter: BANERJEE, Dipanwita

Session Classification: Joint Visible/Accelerators Session

Contribution ID: 26

Type: **not specified**

Inelastic Dark Matter at Accelerators

Friday, 29 April 2016 13:30 (20 minutes)

Summary

Presenter: KRNJAIC, Gordan

Session Classification: Dark Matter at Accelerators

Contribution ID: 27

Type: **not specified**

Belle II Theory

Friday, 29 April 2016 13:50 (20 minutes)

Presenter: ZHONG, Yiming

Session Classification: Dark Matter at Accelerators

Contribution ID: 28

Type: **not specified**

Neutrino and Dark Sector

Friday, 29 April 2016 14:10 (20 minutes)

Presenter: FRIEDLAND, Alexander

Session Classification: Dark Matter at Accelerators

Contribution ID: 29

Type: **not specified**

Discussion and Challenge Questions

Friday, 29 April 2016 14:30 (30 minutes)

Session Classification: Dark Matter at Accelerators

Contribution ID: **30**

Type: **not specified**

Cornell Experiment

Friday, 29 April 2016 16:20 (20 minutes)

Presenter: Prof. ALEXANDER, Jim (Cornell)

Session Classification: Joint Visible/Accelerators Session

Contribution ID: **32**

Type: **not specified**

Preparation for Close Out Session

Saturday, 30 April 2016 13:00 (1h 30m)

Session Classification: Dark Matter at Accelerators

Contribution ID: **33**

Type: **not specified**

Mainz

Saturday, 30 April 2016 10:00 (30 minutes)

Presenter: DENIG, Achim (Univ. Mainz)

Session Classification: Joint Visible/Accelerators Session

Contribution ID: 34

Type: **not specified**

LNF Experiment

Friday, 29 April 2016 16:40 (20 minutes)

Presenter: RAGGI, Mauro (LNF INFN)

Session Classification: Joint Visible/Accelerators Session

Contribution ID: 35

Type: **not specified**

Facilities Overview

Thursday, 28 April 2016 15:15 (45 minutes)

Presenter: ALEXANDER, James (Cornell University (US))

Session Classification: New Facilities

Contribution ID: 36

Type: **not specified**

LCLS-II and SLAC Facilities for Dark Sector Searches

Thursday, 28 April 2016 16:00 (30 minutes)

Presenter: RAUBENHEIMER, Tor (SLAC)

Session Classification: New Facilities

Contribution ID: 37

Type: **not specified**

LHCb

Thursday, 28 April 2016 14:30 (30 minutes)

Presenter: WILLIAMS, J Michael (Massachusetts Inst. of Technology (US))

Session Classification: Visible Dark Photon Searches

Contribution ID: 40

Type: **not specified**

Light Hidden Sectors & Dark Higgses

Thursday, 28 April 2016 16:30 (20 minutes)

Summary

Presenter: RITZ, Adam (University of Victoria)

Session Classification: Rich Dark Sectors

Contribution ID: 41

Type: **not specified**

Dark Naturalness Searches

Thursday, 28 April 2016 16:50 (20 minutes)

Presenter: HAAS, Andrew (New York University)

Session Classification: Rich Dark Sectors

Contribution ID: 42

Type: **not specified**

APEX

Thursday, 28 April 2016 16:30 (30 minutes)

Presenter: WOJTSEKHOWSKI, Bogdan (JLab)

Session Classification: Visible Dark Photon Searches

Contribution ID: 43

Type: **not specified**

Contributed Slides and Discussion (Dark Masses & Naturalness)

Thursday, 28 April 2016 17:10 (25 minutes)

Christopher Hearty - Dark Higgs measurements at BaBar, Belle, and Belle II

David Morrissey - SUSY Hidden Dark Photon

Summary

Session Classification: Rich Dark Sectors

Contribution ID: 44

Type: **not specified**

Discussion and Challenge Questions (Dark Masses & Naturalness)

Thursday, 28 April 2016 17:35 (25 minutes)

Session Classification: Rich Dark Sectors

Contribution ID: 45

Type: **not specified**

Exotics at SHiP

Friday, 29 April 2016 10:00 (20 minutes)

Summary

Presenter: GOLUTVIN, Andrei (Imperial College London)

Session Classification: Rich Dark Sectors

Contribution ID: 46

Type: **not specified**

Exotics Overview

Friday, 29 April 2016 10:20 (20 minutes)

Presenter: Dr ZHANG, Yue (Caltech)

Session Classification: Rich Dark Sectors

Contribution ID: 47

Type: **not specified**

Contributed Slides & Discussion (Exotics)

Friday, 29 April 2016 10:40 (40 minutes)

Stefania Gori - The L_μ - L_τ model

Bartosz Fornal - Evidence for a Protophobic Fifth Force

Andy Haas - New LHC Experiment: MilliQan

Kun Liu - E906/SeaQuest upgrade plan

Keisuke Harigaya - Two important questions

Summary

Session Classification: Rich Dark Sectors

Contribution ID: 48

Type: **not specified**

Discussion and Challenge Questions (Exotics)

Friday, 29 April 2016 11:20 (40 minutes)

Session Classification: Rich Dark Sectors

Contribution ID: 52

Type: **not specified**

Dark Matter Self-Interactions Overview

Friday, 29 April 2016 13:30 (20 minutes)

Presenter: YU, Hai-Bo (University of Michigan)

Session Classification: Rich Dark Sectors

Contribution ID: 53

Type: **not specified**

Slide Presentation and Discussions (Non-Minimal DM)

Friday, 29 April 2016 13:50 (35 minutes)

Summary

Presenters: Dr AN, Haipeng (Caltech); PERELSTEIN, Maxim (Cornell); BLINOV, Nikita (TRIUMF)

Session Classification: Rich Dark Sectors

Contribution ID: 54

Type: **not specified**

Discussion and Challenge Questions (Non-Minimal DM)

Friday, 29 April 2016 14:25 (35 minutes)

Session Classification: Rich Dark Sectors

Contribution ID: 55

Type: **not specified**

Rich Dark Sectors: Preparation for Close-Out

Saturday, 30 April 2016 13:00 (1h 30m)

Summary

Session Classification: Rich Dark Sectors

Contribution ID: 56

Type: **not specified**

Discussion

Friday, 29 April 2016 16:00 (20 minutes)

Session Classification: Joint Visible/Accelerators Session

Contribution ID: 58

Type: **not specified**

VEPP-3 (remote speaker)

Friday, 29 April 2016 10:00 (30 minutes)

Summary

Presenter: RACHEK, Igor (Budker Institute, Novosibirsk)

Session Classification: Visible Dark Photon Searches

Contribution ID: **60**

Type: **not specified**

ATLAS (remote speaker)

Friday, 29 April 2016 10:30 (30 minutes)

Presenter: BEACHAM, James (Ohio State University (US))

Session Classification: Visible Dark Photon Searches

Contribution ID: **61**

Type: **not specified**

Belle II

Friday, 29 April 2016 11:00 (30 minutes)

Summary

Presenter: HEARTY, Christopher (University of British Columbia)

Session Classification: Visible Dark Photon Searches

Contribution ID: **62**

Type: **not specified**

5th Force

Friday, 29 April 2016 13:30 (20 minutes)

Presenter: TANEDO, Flip (UC Irvine)

Session Classification: Visible Dark Photon Searches

Contribution ID: **63**

Type: **not specified**

KLOE-2

Friday, 29 April 2016 13:50 (20 minutes)

Presenter: GRAZIANI, Enrico (INFN - Sezione Roma III)

Session Classification: Visible Dark Photon Searches

Contribution ID: **64**

Type: **not specified**

SeaQuest

Friday, 29 April 2016 14:10 (20 minutes)

Presenter: GARDNER, Susan (University of Kentucky)

Session Classification: Visible Dark Photon Searches

Contribution ID: 65

Type: **not specified**

Dark Pion Theory

Friday, 29 April 2016 14:30 (20 minutes)

Presenter: HARIGAYA, Keisuke (k)

Session Classification: Visible Dark Photon Searches

Contribution ID: **66**

Type: **not specified**

Discussion

Session Classification: Visible Dark Photon Searches

Contribution ID: 67

Type: **not specified**

HPS

Thursday, 28 April 2016 17:00 (30 minutes)

Summary

Presenter: NELSON, Timothy Knight (SLAC National Accelerator Laboratory (US))

Session Classification: Visible Dark Photon Searches

Contribution ID: **68**

Type: **not specified**

Discussion

Friday, 29 April 2016 17:00 (30 minutes)

Session Classification: Joint Visible/Accelerators Session

Contribution ID: **69**

Type: **not specified**

Light Thermal Dark Matter through the Higgs Portal

Saturday, 30 April 2016 10:30 (30 minutes)

Summary

Presenter: KRNJAIC, Gordan (Fermilab)

Session Classification: Joint Visible/Accelerators Session

Contribution ID: 70

Type: **not specified**

Kathryn Zurek – Detecting DM with superfluids

Thursday, 28 April 2016 13:30 (10 minutes)

Session Classification: Direct Detection

Contribution ID: 71

Type: **not specified**

Yue Zhao – Detecting DM with superconductors

Thursday, 28 April 2016 13:45 (10 minutes)

Session Classification: Direct Detection

Contribution ID: 72

Type: **not specified**

Tongyan Lin – Absorption of bosonic light dark matter in superconducting targets

Thursday, 28 April 2016 14:00 (10 minutes)

Session Classification: Direct Detection

Contribution ID: 74

Type: **not specified**

discussion

Thursday, 28 April 2016 14:15 (45 minutes)

Session Classification: Direct Detection

Contribution ID: 75

Type: **not specified**

Jeremy Mock – Xenon Bubble Chambers for Direct Dark Matter Detection

Friday, 29 April 2016 10:00 (10 minutes)

Summary

Session Classification: Direct Detection

Contribution ID: 76

Type: **not specified**

Tien-Tien Yu – LDM detection using electron scattering in scintillators

Friday, 29 April 2016 10:15 (10 minutes)

Summary

Session Classification: Direct Detection

Contribution ID: 77

Type: **not specified**

Aaron Manalaysay – Towards the ultimate ionization threshold in semiconductor detectors

Friday, 29 April 2016 10:30 (10 minutes)

Summary

Session Classification: Direct Detection

Contribution ID: 78

Type: **not specified**

Lauren Hsu – Low Energy Nuclear Recoil Ionization Yield and SuperCDMS Sensitivity (k vs threshold effects)

Friday, 29 April 2016 10:45 (10 minutes)

Summary

Session Classification: Direct Detection

Contribution ID: 79

Type: **not specified**

Ranny Budnik – Color Centers as radiation detectors

Friday, 29 April 2016 11:00 (10 minutes)

Summary

Session Classification: Direct Detection

Contribution ID: **80**

Type: **not specified**

discussion

Friday, 29 April 2016 11:15 (45 minutes)

Session Classification: Direct Detection

Contribution ID: **81**

Type: **not specified**

Maria Elena Monzani – Perspectives for low-mass dark matter searches with the LZ experiment

Friday, 29 April 2016 13:30 (10 minutes)

Summary

Session Classification: Direct Detection

Contribution ID: **82**

Type: **not specified**

Tien-Tien Yu – LDM detection with electron recoils in with semiconductor targets

Friday, 29 April 2016 13:45 (10 minutes)

Summary

Session Classification: Direct Detection

Contribution ID: **84**

Type: **not specified**

Yoni Kahn – Searching for sub-GeV DM with Graphene Target

Friday, 29 April 2016 14:00 (10 minutes)

Summary

Session Classification: Direct Detection

Contribution ID: **85**

Type: **not specified**

discussion

Friday, 29 April 2016 14:15 (45 minutes)

Session Classification: Direct Detection

Contribution ID: **87**

Type: **not specified**

Scott Hertel – Helium part II

Friday, 29 April 2016 15:45 (10 minutes)

Summary

Session Classification: Direct Detection

Contribution ID: **88**

Type: **not specified**

discussion

Friday, 29 April 2016 16:00 (1h 15m)

Session Classification: Direct Detection

Contribution ID: **89**

Type: **not specified**

Rich Dark Sectors primer

Thursday, 28 April 2016 11:35 (10 minutes)

Presenter: MORRISSEY, David (TRIUMF)

Contribution ID: **90**

Type: **not specified**

Dan McKinsey – DM detection in liquid Helium

Friday, 29 April 2016 15:30 (10 minutes)

Session Classification: Direct Detection

Contribution ID: **91**

Type: **not specified**

Antonio Polosa: Carbon nanotubes for DM directional detection

Friday, 29 April 2016 15:15 (10 minutes)

Session Classification: Direct Detection