### Mitchell Workshop on Collider and Dark Matter Physics

### Report of Contributions

Contribution ID: 0 Type: not specified

#### **Introduction - Phenomenology Projects**

Thursday, 18 May 2017 09:00 (10 minutes)

Interconnection between collider and dark matter physics

Presenter: KAMON, Teruki (Texas A & M University (US))

Contribution ID: 1 Type: not specified

## SUSY searches in VBF topology and associated DM interpretations

Thursday, 18 May 2017 09:10 (20 minutes)

Presenter: RUIZ, Jose (Universidad de los Andes (CO))

Contribution ID: 2 Type: not specified

### Probing compressed SUSY with low-pT leptons

Thursday, 18 May 2017 09:30 (20 minutes)

**Presenter:** CASTELLO, Roberto (CERN)

Contribution ID: 4 Type: **not specified** 

#### DM searches in mono-X

Thursday, 18 May 2017 10:30 (20 minutes)

#### **Summary**

**Presenter:** KUNORI, Shuichi (Texas Tech University (US))

Contribution ID: 5 Type: **not specified** 

### Light non-thermal dark matter

Thursday, 18 May 2017 10:50 (20 minutes)

A minimal model and detection prospects

#### **Summary**

**Presenter:** ALLAHVERDI, Rouzbeh (New Mexico University)

Contribution ID: 6 Type: not specified

#### CMS non-thermal DM model interpretation

Thursday, 18 May 2017 11:10 (20 minutes)

Presenter: Mrs UNDLEEB, Sonaina (Texas Tech University (US))

Contribution ID: 7 Type: **not specified** 

#### **Bottom fermion fusion initial states**

Thursday, 18 May 2017 13:30 (20 minutes)

**Presenter:** RATHJENS, Denis (Texas A & M University (US))

Contribution ID: 8 Type: not specified

### Probing Zprime models for B anomalies

Thursday, 18 May 2017 13:50 (20 minutes)

**Presenter:** HUANG, Peisi

Contribution ID: 9 Type: not specified

## Resolving combinatorial ambiguities in dilepton ttbar event topologies

Thursday, 18 May 2017 14:10 (20 minutes)

Presenter: KIM, Jeong Han (University of Kansas)

Contribution ID: 10 Type: not specified

### Beyond simplified dark matter models

Thursday, 18 May 2017 14:30 (20 minutes)

**Presenter:** GONÇALVES, Dorival (University of Pittsburgh)

Contribution ID: 11 Type: not specified

# Dark matter candidates in left-right symmetric models

Thursday, 18 May 2017 14:50 (20 minutes)

**Summary** 

**Presenter:** RESTREPO, Diego

Contribution ID: 12 Type: not specified

### Direct detection inference with minimal assumptions

Thursday, 18 May 2017 15:30 (20 minutes)

Presenter: NEWSTEAD, Jayden (Arizona State University)

Mitchell Works  $\,\cdots\,\,$  / Report of Contributions

Tianjun Li

Contribution ID: 13 Type: not specified

Tianjun Li

Contribution ID: 14 Type: not specified

### Simulations of self-interacting dark matter

Friday, 19 May 2017 13:30 (20 minutes)

#### **Summary**

Presenter: VOGELSBERGER, Mark

Contribution ID: 15 Type: not specified

### Observational tests of self-interacting dark matter

Friday, 19 May 2017 09:00 (15 minutes)

**Summary** 

**Presenter:** PACE, Andrew

Contribution ID: 16 Type: not specified

#### Sommerfeld-enhanced J factors for dwarf galaxies

Friday, 19 May 2017 09:15 (20 minutes)

**Presenter:** WANG, Mei-Yu (Texas A&M University)

Contribution ID: 17 Type: not specified

### The minimal GUT with Inflaton and dark matter unification

Friday, 19 May 2017 09:35 (20 minutes)

**Presenter:** LI, Tianjun

Contribution ID: 18 Type: not specified

# Reviving and testing Bino dark matter with vector-like particle

Friday, 19 May 2017 09:55 (20 minutes)

**Presenter:** ABDULLAH, Mohammad (University of California, Irvine)

Contribution ID: 19 Type: not specified

### **SUSY -MET +leptons overview**

Friday, 19 May 2017 10:40 (20 minutes)

**Presenter:** SHCHUTSKA, Lesya (Eidgenoessische Technische Hochschule Zuerich (CH))

Contribution ID: 20 Type: not specified

### Searches for supersymmetry in hadronic final states

Friday, 19 May 2017 11:00 (20 minutes)

Presenter: ULMER, Keith (Texas A & M University (US))

Contribution ID: 21 Type: not specified

### Searching for hidden sectors at colliders

Friday, 19 May 2017 11:20 (20 minutes)

#### **Summary**

**Presenter:** Dr PERNIE, Luca (Texas A&M University)

Contribution ID: 22 Type: not specified

## The 750 GeV Diphoton Excesses in Realistic String Models

**Presenter:** MAYES, Eric (University of Houston-Clear Lake)

Contribution ID: 23 Type: not specified

#### Collider search(es) for the RH neutrino

Friday, 19 May 2017 11:40 (20 minutes)

Probing right-handed neutrions via the semi-leptonic Higgs channel

Presenter: GAO, Yu (U)

Contribution ID: 24 Type: not specified

# Phenomenology of the Higgs sector of dimension-7 neutrino mass generation mechanism

Friday, 19 May 2017 13:50 (20 minutes)

**Summary** 

**Presenter:** GHOSH, Tathagata (Texas A&M University)

Contribution ID: 25 Type: not specified

# Characterizing dark matter model with Higgs portal at the ILC

Friday, 19 May 2017 14:10 (20 minutes)

**Presenter:** LI, Jinmian (KIAS)

Contribution ID: 26 Type: not specified

#### Dark matter in the new bulk region of the MSSM

Friday, 19 May 2017 14:30 (20 minutes)

**Presenter:** STENGEL, Patrick

Contribution ID: 51 Type: not specified

## Search for direct stop pair production in the fully hadronic final state at CMS

Thursday, 18 May 2017 09:50 (20 minutes)

**Presenter:** WU, Zhenbin (University of Illinois at Chicago (US))

Contribution ID: 52 Type: not specified

## Lessons learned taking indirect detection to the full sky

Thursday, 18 May 2017 15:50 (20 minutes)

**Presenter:** CAMPBELL, Sheldon (The Ohio State University)

Contribution ID: 53 Type: not specified

### Searching for top-philic dark matter

Friday, 19 May 2017 14:50 (20 minutes)

**Presenter:** DIFRANZO, Anthony (Rutgers University)

Contribution ID: 54 Type: not specified

### An effective field theory approach to reheating

Friday, 19 May 2017 15:30 (20 minutes)

**Presenter:** OZSOY, Ogan (Syracuse University)

Contribution ID: 55 Type: not specified

#### Primordial black hole dark matter from UV physics

Friday, 19 May 2017 15:50 (20 minutes)

**Presenter:** WATSON, Scott (Syracuse University)

Contribution ID: 56 Type: not specified

# Enhancing dark matter annihilation with dark Bremsstrahlung

Friday, 19 May 2017 16:10 (20 minutes)

**Presenter:** DENT, James (University of Louisiana at Lafayette)

Contribution ID: 57 Type: not specified

#### Dark matter relics in disformal scalar-tensor theories

Friday, 19 May 2017 16:30 (20 minutes)

**Presenter:** ZAVALA, Ivonne (Swansea University)

Contribution ID: 58 Type: not specified

#### Conformal Scalar-Tensor theories and dark matter

Friday, 19 May 2017 16:50 (15 minutes)

#### **Summary**

**Presenter:** JIMENEZ, Esteban (Texas A&M University)

Contribution ID: 59 Type: not specified

#### Planck constraint on relic primordial black holes

Friday, 19 May 2017 17:05 (15 minutes)

Presenter: CLARK, Steven (Texas A&M University - College Station)

Contribution ID: 60 Type: not specified

#### **500 GeV Collider**

Friday, 19 May 2017 17:20 (20 minutes)

**Presenter:** MCINTYRE, Peter (Texas A&M University)