## The XXVIII International Conference on Supersymmetry and **Unification of Fundamental Interactions (SUSY 2021)**

## Monday 23 August 2021

## **Dark Matter and Astroparticle Physics** (10:35 - 11:35)

-Conveners: Stefania Gori

time	[id] title	presenter
	[131] The SBC Liquid Argon Bubble Chamber for Dark Matter and CEvNS from reactors	PIRO, Marie-Cécile
10:55	[335] Cogeneration of Baryons and Twin Quark Dark Matter	VERHAAREN, Christopher
	[339] Primordial black holes as a natural dark matter candidate in supersymmetry	FLORES, Marcos

#### **Dark Matter and Astroparticle Physics (13:30 - 15:30)**

-Conveners: Stefania Gori

time	[id] title	presenter
13:30	[378] Searching for Solar KDAR with DUNE	DVORNIKOV, Olexiy
13:50	[316] Gamma-ray signatures of velocity-dependent dark matter annihilation	KUMAR, Jason
	[254] Cancellation in Dark Matter-Nucleon Interactions: the Role of Non-Standard-Model-like Yukawa Couplings	Mr DE, Bibhabasu
	[241] Early kinetic decoupling and Higgs invisible decay in simple dark matter models	ABE, Tomohiro
14:50	[32] Wino dark matter searches with dwarf spheroidal galaxies	ISHIWATA, Koji
15:10	[217] A probe into leptophilic scalar dark matter	CHAKRABORTI, Sreemanti

## Dark Matter and Astroparticle Physics (16:00 - 18:00)

-Conveners: Wenyu Wang

time	[id] title	presenter
	[4] Interplay Between Dark Matter Freeze Out/In and Primordial Black Hole Evaporation	Dr HEURTIER, Lucien
16:20	[30] Direct detection of non-galactic light dark matter	HERRERA, Gonzalo
16:40	[39] Dark-sector physics at Belle II	DREYER, Sascha Simon
17:00	[84] Thermal WIMPs and the scale of new physics	Dr GONZALO, Tomas
17:20	[95] Lower Mass Bounds on Freeze-in Dark Matter	LENOCI, Alessandro
	[165] Dark matter phenomenology in two higgs doublet model with complex scalar singlet	DUTTA, Juhi

#### **Dark Matter and Astroparticle Physics** (22:35 - 23:35)

-Conveners: Wenyu Wang

The XXVIII International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY 2021) / Programme time [id] title present

Monday 23 August 2021

time [id] title	presenter
22:35 [210] Re-analysis of 3.5 keV line	PARK, Yujin
22:55 [17] Improving the sensitivity to light dark matter with the Migdal	effect Dr GRILLI DI CORTONA, Giovanni
23:15 [46] Self-interacting dark matter, a dark force, and galaxy anoma	lies WANG, Zhu-Yao

# **Tuesday 24 August 2021**

## **Dark Matter and Astroparticle Physics** (10:35 - 11:55)

-Conveners: Yang Bai

time	[id] title	presenter
10:35	[55] WimPyDD: a modular and customizable Python code for the calculation of WIMP-nucleon scattering direct detection signals in virtually any scenario	Mr KANG, Sunghyun
10:55	[98] BSM physics explanations of \$a_\mu\$ in light of the FNAL muon \$g-2\$ measurement	JACOB, Douglas
11:15	[218] Pseudo-Nambu-Goldstone Dark Matter Model Inspired by Grand Unification	Dr TOMA, Takashi

## **Dark Matter and Astroparticle Physics** (13:30 - 15:30)

-Conveners: Pyungwon Ko

time	[id] title	presenter
13:30	[76] Dark Matter and Radiative Neutrino Mass with dark SU(2) gauge symmetry	NOMURA, Takaaki
	[110] Probing dark matter and primordial black holes with CMB and 21cm observations	CANG, Junsong
14:10	[270] On-shell mediator dark matter models and the Xenon1T excess	XUE, Yilun
14:30	[392] Searching for Dark Matter in the Sun and in the Galactic Centre using Hyper-Kamiokande	Dr ROBLES, Sandra
14:50	[397] Constraining Dark Matter interactions with nucleons and electrons using White Dwarfs	Dr ROBLES, Sandra
15:10	[9] Lorentz Violation of Cosmic Photons from a Phenomenological Viewpoint	MA, Bo-Qiang

## **Dark Matter and Astroparticle Physics** (16:00 - 18:00)

-Conveners: Pyungwon Ko

time	[id] title	presenter
	[247] Phenomenological Implications of Non-Perturbative Effects for Colored Dark Sectors	BECKER, Mathias
16:20	[268] Dark Matter in non-standard cosmologies	KARAMITROS, Dimitrios
	[280] Sensitivity of future e+e- colliders to processes of dark matter production with light mediator exchange	KALINOWSKI, Jan Henryk
17:00	[291] Dark matter and Leptogenesis in Type Ib seesaw model	FU, Bowen
17:20	[298] The CYGNO experiment for Dark Matter direct detection	MESSINA, Andrea
17:40	[415] Dark Matter searches in CMS	ALY, Reham

## **Dark Matter and Astroparticle Physics** (20:00 - 22:00)

-Conveners: Yang Bai

time [id] title	presenter
20:00 [74] Neutrino as the Dark Force	Dr ORLOFSKY, Nicholas

The XXVIII International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY 2021)

Tuesday 24 August 2021

Tuesday 24 August 2021

20:20 [82] Status of DEAP-3600	Dr ADHIKARI, Pushparaj
20:40 [114] Higgs-portal dark matter in brane world cosmology	LIU, Taoli
21:00 [194] Asteroid g-2 experiments: new fifth force and ultralight dark sector tests	Dr TSAI, Yu-Dai
21:20 [203] Multi-component multiscatter capture of Dark Matter	LEVY, Caleb
21:40 [281] Gravitational Microlensing by Dark Matter Subhalos and Boson Stars	WANG, Zihui

## **Dark Matter and Astroparticle Physics** (22:30 - 23:30)

-Conveners: Wenyu Wang

time [id] title	presenter
22:30 [286] Roads for Right-handed Neutrino Dark Matter: Relentless, Standard Freeze-out, and Early Matter Domination	NETO, Jacinto Paulo
22:50 [313] White Dwarfs as Axion Probes	DESSERT, Christopher
23:10 [364] Asymmetric Dark Matter and Baryons from Dark Phase Transitions	MCGEHEE, Robert

# **Thursday 26 August 2021**

#### **Dark Matter and Astroparticle Physics (10:10 - 11:30)**

-Conveners: Yang Bai

time [id] title	presenter
10:10 [468] (In)elastic Boosted Dark Matter Search Prospects at DUNE	KIM, Doojin
10:30 [469] Prospects for Low Mass Dark Matter Searches at DUNE	JANG, Wooyoung
10:50 [166] Lepton Number Violating Electron Recoils at XENON1T and PandaX by the U(1)B-L Model with Non-Standard Interactions	LIN, Yugen
11:10 [221] Neutrino and Axion Astronomy with Dark Matter Experiments	TAKHISTOV, Volodymyr

## **Dark Matter and Astroparticle Physics** (13:30 - 15:30)

-Conveners: Haipeng An

time [id] title		presenter
13:30 [304] Radio-frequency Dark Photon Dark	Matter across the Sun	LIU, Jia
13:50 [37] Low-mass primordial black holes as	the dark matter candidate	LAHA, Ranjan
14:10 [62] A dark clue to seesaw and leptogene scenario with (non)standard cosmology	esis in a pseudo-Dirac singlet doublet	SHOW, SUDIPTA
14:30 [186] Freezing In with Lepton Flavored Fe	ermions	CHATTERJEE, Shiuli
14:50 [239] Search for Dark Sector at Belle		DE PIETRO, Giacomo

## **Dark Matter and Astroparticle Physics** (16:00 - 18:00)

-Conveners: Haipeng An

time	[id] title	presenter
16:00	[26] Light singlino DM of the natural NMSSM	Dr ABDALLAH, Waleed
16:20	[278] Gravitational SIMPs	BARMAN, Basabendu
16:40	[283] A search for dark matter using sub- PeV gamma-rays observed by Tibet ASy	MAITY, Tarak Nath
17:00	[394] Flavor anomalies, Dark matter with vector-like fermions and scalar leptoquark	SINGIRALA, Shivaramakrishna
17:20	[416] Dark Sector searches in CMS	CHAUHAN, Sushil
17:40	[103] Dark matter flux from Accreting Black Holes and Direct Detections	SUN, Sichun

## **Dark Matter and Astroparticle Physics** (22:35 - 23:35)

-Conveners: Yang Bai

time	[id] title	presenter
	[51] A dark matter WIMP that can be detected and definitively identified with currently planned experiments	ALLEN, Roland
22:55	[440] Searches for dark matter with the ATLAS detector	CHAN, Jay