# **TeV Particle Astrophysics 2024**

# Monday, August 26, 2024

Parallel Session: Cosmic Rays - 401 (2:15 PM - 3:45 PM)

-Conveners: Luca Orusa; Benedikt Schroer

time	[id] title	presenter
2:15 PM	[138] A Method to Investigate Potential Time Variation in the Cosmic-Ray Anisotropy	ZILBERMAN, Perri
2:35 PM	[122] Properties of Cosmic H, He, Li and Be Isotopes Measured by the Alpha Magnetic Spectrometer	WEI, Jiahui
2:55 PM	[28] Heritage and challenges for next generation charged cosmic-ray space missions	DURANTI, Matteo
3:15 PM	[195] The energy spectrum of ultra-high energy cosmic rays measured using the Pierre Auger Observatory	ELLWANGER, Fiona

#### Parallel Session: Direct Detection - Cafe (2:15 PM - 3:45 PM)

-Conveners: Leah Jenks

time	[id] title	presenter
2:15 PM	[278] Status update on the XENONnT experiment	YUAN, Lanqing
2:30 PM	[81] On track for discovery of sub-GeV dark matter with liquid xenon TPCs	GIBBONS, Ryan
2:45 PM	[132] Backgrounds in the LUX-ZEPLIN (LZ) Experiment	WANG, Ann
3:00 PM	[212] Search for atmospheric millicharged particles using the LUX-ZEPLIN detector	XU, Yongheng
3:15 PM	[43] A Review of NEST Models, and Their Application to Particle Identification	RISCHBIETER, Greg

#### Parallel Session: HE Astro / Gravitational Waves - 501 (2:15 PM - 3:45 PM)

-Conveners: Ariane Dekker; Christopher Eckner

time	[id] title	presenter
2:15 PM	[20] Neutrino and Electromagnetic Signals from TDE Isotropic Winds and Relativistic Jets	Dr YUAN, Chengchao
2:35 PM	[61] Large-Scale Environments in BL Lac objects: Connecting Gamma-Ray Absorption Features to Neutrino Production	FOFFANO, Luca
2:50 PM	[226] Investigating the origin of the TeV gamma-rays in the PeVatron 1LHAASO J2002+3244u	ABDELMAGUID, Moaz
3:05 PM	[192] Impact of cosmic rays on the pair beam instability from TeV blazars	HIRATA, Christopher
3:25 PM	[199] The multiwavelength signature of the multizone jets of Mkn 421	KANTZAS, Dimitrios

Parallel Session: Indirect Detection - 201 (2:15 PM - 3:45 PM)

-Conveners: Yitian Sun; Elena Pinetti

time	[id] title	presenter
2:15 PM	[2] Emulation of cosmic-ray antideuteron fluxes from dark matter annihilation	RATHMANN, Lena
2:30 PM	[62] Indirect Dark Matter Searches with GAPS experiment	ZENG, Jiancheng
2:45 PM	[130] VERITAS Observations of Dark Matter Subhalo Candidates	LUNDY, Matthew
3:00 PM	[242] Updated Dark Matter Annihilation Search from Dwarf Galaxies with HAWC	SALAZAR-GALLEGOS, Daniel

#### Parallel Session: Neutrino Astrophysics - 161 (2:15 PM - 3:45 PM)

-Conveners: Donglian Xu; Bei Zhou

time	[id] title	presenter
2:15 PM	[176] IceCube: from the IceCube Upgrade to IceCube-Gen2	Prof. KARLE, Albrecht
2:35 PM	[75] Evidence of Neutrino Excess from a Population of X-ray Bright non-Blazar AGNs in the Northern Sky with 13 Years of IceCube Data	KONTRIMAS, Tomas
2:55 PM	[114] The Payload for Ultrahigh Energy Observations: Overview and Updates	BEAUFORE, Lucas
3:15 PM	[108] A Combined Fit of Ultra-High-Energy Cosmic Rays and Neutrinos from Pierre Auger and IceCube Observatories	LU, Lu
3:30 PM	[78] Revealing the production mechanism of high-energy neutrinos from NGC 1068	DAS, Abhishek

## Parallel Session: Particle Physics / Cosmology - 301 (2:15 PM - 3:45 PM)

-Conveners: Joshua Foster; Huangyu Xiao

time	[id] title	presenter
2:15 PM	[93] Electron Trap as a meV Axion and Dark Photon Dark Matter Detector	XIAO, yawen
2:30 PM	[131] Gamma rays from supernova axions converting in stellar magnetic fields	PARK, Yujin
2:45 PM	[46] MicroBooNE's Beyond Standard Model Physics Program	HAGAMAN, Lee
3:00 PM	[172] Interplay among gravitational waves, dark matter and collider signals in the singlet scalar extended type-II seesaw model	ROY, Subhojit
3:15 PM	[216] Cosmological case study of a tower of neutrino states	GHOSH, Subhajit
3:30 PM	[268] Minimal Dark Matter Freeze-in with Low Reheating Temperatures (Implications for Direct Detection	MONTEFALCONE, Gabriele

## Parallel Session: Cosmic Rays - 401 (4:15 PM - 5:45 PM)

-Conveners: William Luszczak; Kathryn Plant; Benedikt Schroer

time	[id] title	presenter
4:15 PM	[241] Anisotropy in the Arrival Direction of UHECRs: Latest Results from the Pierre Auger Observatory	DEMELLONETO, Joao
4:35 PM	[197] Mass Composition Interpretation with the Pierre Auger Observatory	MARTINS, Miguel Alexandre
4:50 PM	[196] AugerPrime - the new Phase of the measurements at the Pierre Auger Observatory	Dr BORODAI, Nataliia

5:05 PM	[198] Proton-air interactions at ultra-high energies in muon-depleted air showers with different depths	MARTINS, Miguel Alexandre
5:25 PM	[106] Cosmic positrons from catalogued pulsars	DONATO, Fiorenza

## Parallel Session: Direct Detection - Cafe (4:15 PM - 5:45 PM)

-Conveners: Leah Jenks

time	[id] title	presenter
4:15 PM	[240] Searching for Dark Matter in the French Alps with DAMIC-M	MUNAGAVALASA, Sravan
4:30 PM	[164] COSINUS: a new cryogenic dark matter experiment	REINDL, Florian
4:45 PM	[222] EXCESS events in low-threshold particle detectors	BAXTER, Daniel
5:00 PM	[53] Measurements of scintillation and ionization signals from low-energy liquid argon nuclear recoils with the ReD experiment	MOURA SANTOS, Edivaldo
5:15 PM	[83] Status of the TESSERACT Dark Matter Experiment	WILLIAMS, Michael

#### Parallel Session: HE Astro / Gravitational Waves - 501 (4:15 PM - 5:45 PM)

-Conveners: Ariane Dekker; Dimitrios Kantzas

time	[id] title	presenter
4:15 PM	[45] Status of the High Energy cosmic-Radiation Detection (HERD) mission	LUCCHETTA, Giulio
4:30 PM	[111] Status of the ALPACA/ALPAQUITA experiment	KATAYOSE, Yusaku
4:45 PM	[202] Deployment and Status of the Radar Echo Telescope	FRIKKEN, dylan
5:00 PM	[244] Probing Sterile Neutrinos from Supernova using Gamma ray Telescopes	CHAUHAN, Garv
5:15 PM	[247] Searching for Beyond-Standard Model Neutrino Physics in Light of AGN Modeling Uncertainties	HYDE, Jeff
5:30 PM	[27] Gravitational waves from thick cosmic strings of a supersymmetric flat direction	PARK, Wan-il

#### Parallel Session: Indirect Detection - 201 (4:15 PM - 5:45 PM)

-Conveners: Deheng Song; Elena Pinetti

time	[id] title	presenter
4:15 PM	[14] Constraining Dark Matter Annihilation with Fermi -LAT Observations of Ultra-Faint Compact Stellar Systems	CIRCIELLO, Antonio
4:30 PM	[18] Gamma-ray signals from light dark matter	DUTRA, Maíra
4:45 PM	[68] Applying Simulation-Based Inference to Spectral and Spatial Information from the Galactic Center Gamma-Ray Excess	CHRISTY, Katharena
5:00 PM	[144] Learning the energy dependence of a possible point source explanation of the Galactic Center Excess	SCHOEN, Eve
5:15 PM	[228] Overconfidence in Non-Poissonian Template Fitting	SUN, Yitian

Parallel Session: Neutrino Astrophysics - 161 (4:15 PM - 5:45 PM)

-Conveners: Nepomuk Otte; Bei Zhou

time	[id] title	presenter
4:15 PM	[58] POEMMA Balloon with Radio: a multimessenger approach on an ultra-long duration balloon	PANICO, Beatrice
4:30 PM	[200] The Radio-Neutrino Observatory in Greenland: Status and Perspectives	WINDISCHHOFER, Philipp
4:45 PM	[205] Progress towards an array-wide diffuse UHE neutrino search with the Askaryan Radio Array	MUZIO, Marco
5:00 PM	[89] EUSO-SPB2's Neutrino Target-of-Opportunity Observation Program and Prospects for PBR	VENTERS, Tonia
5:15 PM	[105] Characterization of the Diffuse Astrophysical Neutrino Spectrum with All Flavor Starting Events in IceCube	BASU, Vedant
5:30 PM	[174] BSM Physics with IceCube Tracks: Sterile Neutrinos and More	HARDIN, John

# Tuesday, August 27, 2024

#### Parallel Session: Cosmic Rays - 501 (2:00 PM - 3:30 PM)

-Conveners: Toshihiro Fujii; Rebecca Diesing; Benedikt Schroer

time	[id] title	presenter
2:00 PM	[66] Astroparticle Fill-In-The-Blank: Using Atmospheric Muons to Study Tornadoes	LUSZCZAK, William
2:20 PM	[221] Space weather monitoring and forecasting: a data-driven approach	CRISTOFORETTI, Marco
2:35 PM	[204] Gamma-Ray and AntiMatter Survey(GRAMS) Experiment	ARAMAKI, Tsuguo
2:50 PM	[17] Latest advancements on the cosmic-ray proton flux towards PeV energies with DAMPE	TYKHONOV, Andrii
3:10 PM	[231] Evaluating the potential of low mass stars as sources of TeV cosmic rays	PLANT, Kathryn

#### Parallel Session: Dark Matter - Cafe (2:00 PM - 3:30 PM)

-Conveners: Pouya Asadi; Gordan Krnjaic

time	[id] title	presenter
2:00 PM	[15] Scalars remember the hot big bang	CYNCYNATES, David
2:15 PM	[21] Detecting Rare Species of Dark Matter with Terrestrial Detectors	RAY, Anupam
2:30 PM	[24] Searching for Dark Photon Production Using Genetic Algorithms	ARNI, Rohan
2:45 PM	[181] Dark Matter Raining on DUNE and Other Large Volume Detectors	ACEVEDO, Javier
3:00 PM	[239] Loosely Bound Composite Dark Matter	BOUKHTOUCHEN, Yilda
3:15 PM	[51] A ROMP through Dark Matter in the early universe	HEEBA, Saniya

#### Parallel Session: Gamma ray astronomy - 401 (2:00 PM - 3:30 PM)

-Conveners: Mahmoud S A Alawashra; Anastasia Sokolenko

time	[id] title	presenter
2:00 PM	[286] Gamma-ray Emission from a Young Star Cluster in the Star-Forming Region RCW 38	PANDEY, Paarmita
2:15 PM	[287] Temporal variability and SED evolution modeling of Mrk421 during its most violent year	ABHIR, Jayant
2:30 PM	[288] Constraints on the intergalactic magnetic field from Fermi-LAT observations of GRB 221009A	MEYER, Manuel
2:45 PM	[289] Modeling the Afterglow of GRB 221009A: Constraints from MeV-GeV-TeV Data	FOFFANO, Luca
3:00 PM	[290] HESS J1809-193 : Gamma Ray emission by Cosmic Ray from the Past Explosion	BOXI, Sovan
3:15 PM	[291] A real-time monitoring on extragalatic transsents with the LHAASO-WCDA detector	ZHA, Min

Parallel Session: Indirect Detection - 201 (2:00 PM - 3:30 PM)

#### -Conveners: Weishuang Linda Xu; Elena Pinetti

time	[id] title	presenter
2:00 PM	[25] Birth of the first stars amidst decaying and annihilating dark matter	QIN, Wenzer
2:15 PM	[35] Seeking pulsars for dark matter scattering searches	TYAGI, Narayani
2:30 PM	[55] Immortal Stars at the Galactic Center	JOHN, Isabelle
2:45 PM	[82] Dark Kinetic Heating of Exoplanets and Brown Dwarfs	REILLY, Aidan
3:00 PM	[152] Dark matter limits from the tip of the red giant branch	VINCENT, Aaron

#### Parallel Session: Neutrino Astrophysics - 161 (2:00 PM - 3:30 PM)

-Conveners: Tianlu Yuan; Bei Zhou

time	[id] title	presenter
2:00 PM	[245] IceCube searches for neutrinos from gravitational wave sources	VANDENBROUCKE, Justin
2:20 PM	[156] Characterizing High-Energy Neutrino Emission Parameters in Bright Seyfert Galaxies and Quasars	CARPIO, Jose
2:40 PM	[203] Search for neutrino emission from Seyfert Galaxies with IceCube	YU, Shiqi
3:00 PM	[170] Search for Astrophysical Neutrinos from 4FGL Galactic Plane Sources with the Pion Bump Signature	BABU, Rishi

## Parallel Session: Particle Physics/Cosmology - 301 (2:00 PM - 3:30 PM)

-Conveners: Nicholas Kamp; Huangyu Xiao

time	[id] title	presenter
2:00 PM	[34] Primordial black hole probes of heavy neutral leptons	TOLINO, Agnese
2:15 PM	[209] Leptogenesis, dark matter and gravitational waves from discrete symmetry breaking	VATSYAYAN, Drona
2:30 PM	[72] Boosted Relic Neutrino Background by Cosmic Reservoirs	NAVA, Jacopo
2:45 PM	[223] Neutrino mass bounds from DESI 2024 are relaxed by Planck PR4 and cosmological supernovae	ALLALI, Itamar
3:00 PM	[128] CUPID: The next generation upgrade of CUORE to search for $0\nu\beta\beta$ decay	WELLIVER, Bradford

## Parallel Session: Cosmic Rays - 501 (4:00 PM - 5:30 PM)

-Conveners: Fiorenza Donato; Andrii Tykhonov; Benedikt Schroer

time	[id] title	presenter
4:00 PM	[79] Scrutinising cosmic ray accelerators with spectral features	STALL, Anton
4:15 PM	[84] Particle Acceleration by Magnetized Turbulence in Coronae of Active Galactic Nuclei	COMISSO, Luca
4:30 PM	[92] Particle acceleration in 3D hybrid simulations of astrophysical quasi-perpendicular shocks	ORUSA, Luca
4:50 PM	[215] From Microphysical Theory to Multi-Messenger Observations: A Semi-Analytic Approach to Cosmic Ray Acceleration	DIESING, Rebecca
5:10 PM	[13] Acceleration of particles at the border of binary systems	COIMBRA-ARAÚJO, Carlos

#### Parallel Session: Direct Detection - Cafe (4:00 PM - 5:30 PM)

-Conveners: Leah Jenks

time	[id] title	presenter
4:00 PM	[44] Basic Energy-Threshold Modeling for Snowball Chambers	SZYDAGIS, Matthew
4:15 PM	[217] PICO bubble chambers for the direct detection of dark matter	HARRIS, Orin
4:30 PM	[26] Status of the COSINE-100 dark matter search experiment	LEE, Hyunsu
4:45 PM	[235] Scintillating Bubble Chambers for Direct Dark Matter Detection, and an Update on SBC-LAr10	SHENG, Zhiheng
5:00 PM	[213] Possible Direction Sensitivity for Short Tracks in LAr	Prof. MARTOFF, Jeff

#### Parallel Session: Gamma ray astronomy - 401 (4:00 PM - 5:30 PM)

-Conveners: Manuel Meyer; Anastasia Sokolenko

time	[id] title	presenter
4:00 PM	[292] Commissioning and Preliminary Observation Results of SST-1M Cherenkov telescopes	TAVERNIER, Thomas
4:15 PM	[293] Observations of the IC 443 region with HAWC	AYALA, Hugo
4:30 PM	[294] Microquasars Detections with HAWC: Exploring the Intriguing V4641 Sgr	WANG, Xiaojie
4:45 PM	[296] Nonlinear feedback of the electrostatic instability on the blazar-induced pair beam and GeV cascade	ALAWASHRA, Mahmoud S A
5:00 PM	[297] Characterizing the Fermi-LAT high-latitude sky with simulation-based inference	ECKNER, Christopher
5:15 PM	[299] Status of the Schwarzschild-Couder Telescope project: Exploring an innovative technology for gamma-ray astrophysics	MUKHERJEE, Reshmi

#### Parallel Session: Indirect Detection - 201 (4:00 PM - 5:30 PM)

-Conveners: Milena Crnogorcevic; Elena Pinetti

time	[id] title	presenter
4:00 PM	[74] Search for DM annihilation from extra-galactic point sources with IceCube	LI, Ruohan
4:15 PM	[119] Cosmic Ray Boosted Dark Matter at IceCube	CAPPIELLO, Christopher
4:30 PM	[148] Constraining BSM physics with galactic center gas clouds	BHOONAH, Amit
4:45 PM	[243] Heavy Dark Matter Annihilation Search Towards Dwarf Galaxies with the IceCube Neutrino Observatory.	SALAZAR-GALLEGOS, Daniel
5:00 PM	[117] The road to Higgsino dark matter	XU, Weishuang Linda

## Parallel Session: Neutrino Astrophysics - 161 (4:00 PM - 5:30 PM)

-Conveners: Ting Cheng; Bei Zhou

time	[id] title	presenter
4:00 PM	[159] Next-Generation Diffuse Neutrino Combined Fit: Inclusion of Multi-Flavour Shower Events Partially Contained in IceCube	RECHAV, Zoe
4:15 PM	[135] TAMBO: Searching for Tau Neutrinos in the Peruvian Andes	THOMPSON, Will

4:30 PM	[177] Measuring the Flavor of UHE Neutrinos with PUEO	CUMMINGS, Austin
4:45 PM	[169] Flavour Anisotropies in High-Evergy Astrophysical Neutrinos	TELALOVIC, Bernanda
5:00 PM	[269] Physics results of KM3NeT and update on the construction phase	CIRELLA, Marco

## Parallel Session: Particle Physics/ Cosmology - 301 (4:00 PM - 5:30 PM)

-Conveners: Jae Hyeok Chang; Huangyu Xiao

time	[id] title	presenter
4:00 PM	[42] Constraining the primordial black hole abundance via Big-Bang nucleosynthesis	IOCCO, Fabio
4:15 PM	[161] Corrections to Hawking radiation from asteroid-mass primordial black holes: description of the stochastic charge effect in quantum electrodynamics	VASQUEZ, Gabriel
4:30 PM	[162] Exploding Primordial Black Holes	IGUAZ JUAN, Quim
4:45 PM	[208] Warm Hawking Relics From Primordial Black Hole Domination	SHALLUE, Christopher
5:00 PM	[96] Dark Matter Primordial Black Holes from Warm Natural Inflation	MATHEWS, Grant

## Wednesday, August 28, 2024

#### Parallel Session: Dark Matter - Cafe (2:15 PM - 3:45 PM)

-Conveners: David Cyncynates; Gordan Krnjaic

time	[id] title	presenter
2:15 PM	[125] (Can you) Infer the dark matter profile of the Milky Way from its circular velocity curve	OU, Xiaowei
2:30 PM	[160] Cosmological profile likelihood constraints on dark matter-baryon scattering	STRAIGHT, Maria
2:45 PM	[253] Giant planet airglow induced by dark matter annihilation	MOORE, Marianne
3:00 PM	[254] The timescales for dark matter heating of old neutron stars	ROBLES, Sandra
3:15 PM	[250] Searching for dark matter with molecular targets in astrophysical objects	BLANCO, Carlos

## Parallel Session: Gamma ray astronomy - 161 (2:15 PM - 3:45 PM)

-Conveners: Christopher Eckner; Anastasia Sokolenko

time	[id] title	presenter
2:15 PM	[300] 10 years of ultra-high-energy science with HAWC	MALONE, Kelly
2:30 PM	[301] VERITAS follow-up of newly identified LHAASO sources	WONG, Samantha
2:45 PM	[302] Morphological and Spectral Studies on SS 433 Jet Lobes with HAWC	RHO, Chang Dong
3:00 PM	[303] Do the LHAASO Galactic diffuse emission data require a contribution from unresolved sources?	VECCHIOTTI, Vittoria
3:15 PM	[304] Unraveling the Complex Gamma-Ray Emission from eHWC J1825-134 Region with HAWC: the Transition of TeV Halo	HUANG, Dezhi
3:30 PM	[305] Origin of Diffuse Gamma Rays Detected above 398 TeV by the Tibet ASy Experiment	KATO, Sei

#### Parallel Session: HE Astro / Gravitational Waves - 501 (2:15 PM - 3:45 PM)

-Conveners: Garv Chauhan; Ariane Dekker

time	[id] title	presenter
2:15 PM	[30] Variability of the Galactic CRs and Diffuse Gamma-Ray Emission Predicted with GALPROP	Dr MARINOS, Peter
2:35 PM	[47] Pulsar gamma ray halos and implications on cosmic rays propagation	BI, Xiaojun
2:55 PM	[65] Search for neutrino signals from the Galactic plane and Cygnus Bubble based on LHAASO $\gamma$ -ray observations	LI, Wenlian
3:10 PM	[147] TeV Halos: A New Class of Gamma-Ray Sources Provide Insight into Galactic Diffusion	LINDEN, Tim
3:30 PM	[56] Multi-wavelength Emission from Relativistic Jets and A Magnetically Arrested Disk of Cygnus X-1	KUZE, Riku

Parallel Session: Indirect Detection - 201 (2:15 PM - 3:45 PM)

-Conveners: Lena Rathmann; Elena Pinetti

time	[id] title	presenter
2:15 PM	[110] Search for heavy dark matter with Fermi LAT	Dr SONG, Deheng
2:30 PM	[134] Testing Wino Dark Matter with VERITAS Dwarf Galaxy Observations	BAUMGART, Matthew
2:45 PM	[151] Indirect Searches for Ultraheavy Dark Matter in the Time Domain	LUO, Xuheng
3:00 PM	[168] Particle dark matter searches through cross-correlations	FORNENGO, Nicolao
3:15 PM	[210] Dark Matter from Intermediate-Mass Black Holes with Fermi-LAT	CRNOGORCEVIC, Milena
3:30 PM	[237] Evidence of gamma-rays from intermediate-mass black holes in dwarf galaxies	NEMMEN, Rodrigo

## Parallel Session: Neutrino Astrophysics - 401 (2:15 PM - 3:45 PM)

-Conveners: Bei Zhou; Will Thompson

time	[id] title	presenter
2:15 PM	[118] Direct hits of atmospheric muons on neutrino detectors	GARG, DIKSHA
2:30 PM	[248] Design and Hardware Overview of PUEO	SCRANDIS, Rachel
2:45 PM	[201] The Radio-Neutrino Observatory in Greenland: Instrumentation Overview	VIJAI, Aishwarya
3:00 PM	[187] Particle Shower Simulation Studies for IceCube	YILDIZCI, Emre
3:15 PM	[252] nuSpaceSim: A Comprehensive Simulation Package for Modeling the Response of Space-based Experiments to Upward-moving Extensive Air Showers sources by Cosmic Neutrinos in the Earth	KRIZMANIC, John
3:30 PM	[126] Modeling the refractive index profile of polar ice with the Askaryan Radio Array	COUBERLY, Kenny

## Parallel Session: Particle Physics/Cosmology - 301 (2:15 PM - 3:45 PM)

-Conveners: Melissa Diamond; Huangyu Xiao

time	[id] title	presenter
2:15 PM	[129] Axion Production in Highly Magnetized Astrophysical Plasmas	PRABHU, Anirudh
2:30 PM	[59] Axion-Photon Sensitivity with NuSTAR Observations of M82 and M87	NING, Orion
2:45 PM	[91] ALP-Photon conversion in Neutron Stars	LI, Lingfeng
3:00 PM	[180] What AGNs and GRBs tell us about axion-like particles	Dr GHOSH, Oindrila
3:15 PM	[19] Effects of Superradiance in Active Galactic Nuclei	SARMAH, Priyanka
3:30 PM	[141] Implications of ALP-photon conversion for the diffuse gamma-ray background associated with high-energy neutrinos	Mr RIABTSEV, Kirill

#### Parallel Session: Dark Matter - Cafe (4:15 PM - 5:45 PM)

-Conveners: Saniya Heeba; Gordan Krnjaic

time	[id] title	presenter
4:15 PM	[8] Vectorlike Dark Confinement at Direct Detection Experiments	ASADI, Pouya
4:30 PM	[54] Dark matter direct detection in the presence of the Large Magellanic Cloud	BOZORGNIA, Nassim

4:45 PM	[109] The effect of the LMC on non standard interactions for future dark matter direct detection experiments	REYNOSO CORDOVA, Javier
5:00 PM	[146] Dark Matter Subhalo Abundance in the Solar Neighborhood and Its Effect on Direct Detections	ZHANG, Xiuyuan
5:15 PM	[184] Broadening direct searches for light dark matter	LEHMANN, Benjamin
5:30 PM	[9] The SABRE South Experiment at the Stawell Underground Physics Laboratory	Dr BOLOGNINO, Irene

## Parallel Session: Gamma ray astronomy - 161 (4:15 PM - 5:45 PM)

#### -Conveners: Vikram Dwarkadas; Anastasia Sokolenko

time	[id] title	presenter
4:15 PM	[306] Multiwave+B63length study of Galactic PeVatrons LHAASO J2108+5157 and LHAASO J0341+5258	BANGALE, Priyadarshini
4:30 PM	[307] Stacking searches for TeV halos with HAWC	WU, Hongyi
4:45 PM	[308] Analysis Results of HAWC Data Corresponding to 1LHAASO Sources Exclusively Linked to Fermi-LAT detected GeV Gamma Rays	ERGIN, Tulun
5:00 PM	[309] Fermi-LAT analysis of the CSO NGC4278 detected by LHAASO	BRONZINI, Ettore
5:15 PM	[310] M87's Multi-Wavelength Behavior During the 2018 EHT Campaign including a very high energy gamma-ray flaring episode	HAHN, Alexander
5:30 PM	[311] Searching for the next GRB170817A with Swift BAT GUANO	DELAUNAY, Jimmy

## Parallel Session: HE Astro / Gravitational Waves - 501 (4:15 PM - 5:45 PM)

#### -Conveners: Mainak Mukhopadhyay; Ariane Dekker

time	[id] title	presenter
4:15 PM	[23] Crescendo Beyond the Horizon: More Gravitational Waves from Domain Walls Bounded by Inflated Cosmic Strings	BAO, Yunjia
4:30 PM	[69] Imprints of Early Universe Cosmology on Gravitational waves	RAI, Mudit
4:50 PM	[236] Supermassive binary black holes and EM counterparts	Prof. NEMMEN, Rodrigo
5:10 PM	[127] Wavefrontsensor for the Einstein Telescope	SCHWAB, Benjamin
5:25 PM	[330] Construction of the Very High Energy Gamma-Ray Spectrum in Centaurus A Based on Filamentary Jet Model	Dr HONDA, Yasuko

## Parallel Session: Neutrino Astrophysics - 401 (4:15 PM - 5:45 PM)

## -Conveners: Bei Zhou; Jose Carpio

time	[id] title	presenter
4:15 PM	[225] Constraints on Heavy Asymmetric and Symmetric Dark Matter from the Glashow Resonance	LIU, Qinrui
4:30 PM	[98] Final state radiation from high and ultrahigh energy neutrino interactions	ZHOU, Bei
4:45 PM	[10] Study of a Z' model based on data from ANTARES and ICECUBE	Dr PARADA VALENCIA, Alexander
5:00 PM	[140] Imprints of High Energy Neutrino Magnetic Moment	CHENG, Ting

5:15 PM	[220] Effects of Biaxial Birefringence on Polarization Reconstruction for the Askaryan Radio Array	SALCEDO GOMEZ, Alan
5:30 PM	[124] A high-efficiency UHE neutrino search combining the phased array and traditional antennas of the Askaryan Radio Array	DASGUPTA, Paramita

## Parallel Session: Particle Physics/Cosmology - 301 (4:15 PM - 5:45 PM)

#### -Conveners: Anirudh Prabhu; Huangyu Xiao

time	[id] title	presenter
4:15 PM	[219] An Axion Pulsarscope	KHELASHVILI, Mariia
4:30 PM	[230] Simulating Post-Inflationary Axion Misalignment with Adaptive Mesh Refinement	FOSTER, Joshua
4:45 PM	[238] Ultra-light Axions in the Halo Bias	DEPORZIO, Nicholas
5:00 PM	[113] Axion Stars: Mass Functions and Constraints	CHANG, Jae Hyeok
5:15 PM	[186] Domain walls of string theory axions	DAS, Saurav

# Thursday, August 29, 2024

#### Parallel Session: Dark Matter - 201 (2:00 PM - 3:30 PM)

-Conveners: Jared Barron; Gordan Krnjaic

time	[id] title	presenter
2:00 PM	[31] JWST Lensed quasar dark matter survey: Strongest gravitational lensing limit on the dark matter free streaming length to date	KEELEY, Ryan
2:15 PM	[37] Probing the Dark Sector using an Beam Dump Facility at Fermilab in the PIP-II Era	TOUPS, Matthew
2:30 PM	[38] Dark matter minihalos from primordial magnetic fields	RALEGANKAR, Pranjal
2:45 PM	[52] Constraints of Mixed Warm Dark Matter from Milky Way Satellite Galaxies	TAN, Chin Yi
3:00 PM	[90] Searching for Dark Matter interactions in the CMB with ACT and SPT	ZHOU, Zilu
3:15 PM	[155] Probabilistic Inference of the Structure and Orbit of Milky Way Satellites with Semi-Analytic Modeling	FOLSOM, Dylan

#### Parallel Session: Gamma ray astronomy - 161 (2:00 PM - 3:30 PM)

-Conveners: Milena Crnogorcevic; Anastasia Sokolenko

time	[id] title	presenter
2:00 PM	[312] Possible jet contribution to the γ-ray luminosity in NGC 1068	SALVATORE, Silvia
2:15 PM	[313] Characterizing the Line of Sight to Gamma-ray Emitting Galaxies	FURNISS, Amy
2:30 PM	[314] On the distribution of cosmic rays in the Galactic Center region: new insights from H.E.S.S.	DEVIN, Justine
2:45 PM	[315] Looking at Low-Luminosity AGNs under a gamma-ray lens	TOMAR, Gunjan
3:00 PM	[316] Deep observations of the starburst galaxy M82 with VERITAS	SAHA, Lab
3:15 PM	[317] Measurement of the proton spectrum from 4 TeV to 200 TeV using H.E.S.S.	BRUNO, Benedetta

#### Parallel Session: Neutrino Astrophysics - 401 (2:00 PM - 3:30 PM)

-Conveners: Shiqi Yu; Bei Zhou

time	[id] title	presenter
2:00 PM	[99] Two Watts is All You Need: Enabling In-Detector Real-Time Machine Learning for Neutrino Telescopes Via Edge Computing	JIN, Miaochen
2:15 PM	[123] Orbital Compton-Getting Dipole with IceCube Cosmic-Ray Muons	DÍAZ VÉLEZ, Juan Carlos
2:30 PM	[136] Investigating Cosmic Ray Anisotropy with IceTop Surface Array.	ABBASI, Rasha
2:45 PM	[145] Status and Future Plans for IceAct at the IceCube Neutrino Observatory	VAIDYANATHAN, Arun
3:00 PM	[154] Search for neutrino emission from Compton Thick AGN with IceCube	GOSWAMI, Sreetama
3:15 PM	[166] Modulation of Ultra-High Energy Neutrino-Induced Radio Signals by Evolving Polar Ice	KYRIACOU, Alexander

#### Parallel Session: Particle Physics/Cosmology - 301 (2:00 PM - 3:30 PM)

#### -Conveners: Aurora Ireland; Huangyu Xiao

time	[id] title	presenter
2:00 PM	[87] Minimal Warm Inflation with a heavy QCD axion	BERGHAUS, Kim
2:15 PM	[257] Baryogenesis Relics from Binary Pulsars to Terrestrial Experiments	THOMPSON, Adrian
2:30 PM	[133] CMB Spectral Distortions from Dark Photon Oscillation	Dr GAN, Xucheng
2:45 PM	[258] Kinetic heating of a neutron star via coherent scatterings with relic neutrinos	OKAWA, Takuya
3:00 PM	[97] Electroweak Axion Portal to Dark Matter	NGUYEN, Ngan
3:15 PM	[270] Stringent constraints on intra-galactic substructure and the primordial power spectrum from ultra-faint dwarf dynamics	RAMANI, Harikrishnan

#### Parallel Session: Dark Matter - 201 (4:00 PM - 5:30 PM)

-Conveners: Benjamin Lehmann; Gordan Krnjaic

time	[id] title	presenter
4:00 PM	[150] Cloudy with a Chance of Dark Matter	KIM, Leo
4:15 PM	[157] Disruption of Dark Matter Minihalos by Successive Stellar Encounters	DSOUZA, lan
4:30 PM	[211] Simulating Atomic Dark Matter in Dwarf Galaxies: The Impact of Dark Dissipation on Galactic Scales	ROY, Sandip
4:45 PM	[214] Probing atomic dark matter with the high-redshift UV luminosity function	BARRON, Jared
5:00 PM	[249] Probing Atomic Dark Matter with the Lyman Alpha Forest	GEMMELL, Caleb
5:15 PM	[229] A Systematic EFT Approach to SIDM and Detection Prospects Using Stellar Streams	PARIKH, Aditya

#### Parallel Session: Gamma ray astronomy - 161 (4:00 PM - 5:30 PM)

-Conveners: Amy Furniss; Anastasia Sokolenko

time	[id] title	presenter
4:00 PM	[318] Envisioning the Future of Gamma-Ray Astronomy in Space: Overview of NASA's FIG SAG Effort	CRNOGORCEVIC, Milena
4:20 PM	[319] Exploring the Gamma-Ray Emission From Young Core-Collapse Supernovae, and their Detectability with the Cherenkov Telescope Array	DWARKADAS, Vikram
4:40 PM	[320] Detection of OP313 at z=0.997 with LST-1: the most distant VHE blazar to date	NIEVAS ROSILLO, Mireia
5:00 PM	[321] LST-1 follow-up of the exceptionally bright gamma-ray burst GRB 221009A	TERAUCHI, Kenta
5:15 PM	[322] Study of the variable VHE gamma-ray emission of bright AGN with LST-1	TAKEISHI, Ryuji

#### Parallel Session: HE Astro / Gravitational Waves - 501 (4:00 PM - 5:30 PM)

-Conveners: Ariane Dekker; Dimitrios Kantzas

time [id] title presenter

4:00 PM	[173] Signature of vector dark matter in NANOGrav	HAIT, ARPAN
4:15 PM	[41] Probing the origin of astrophysical neutrinos and ultra-high energy cosmic rays using VERITAS and multiwavelength observations of TXS 0506+056	ACHARYYA, Atreya
4:30 PM	[100] Particle acceleration and production of TeV-PeV neutrinos in magnetized PNS winds	Dr BHATTACHARYA, Mukul
4:45 PM	[218] Hints for a Supermassive Black Hole Binary at the center of the blazar J1048+7143*	JAROSCHEWSKI, Ilja
5:00 PM	[234] Jet propagation and shock breakout emission from neutron star merger simulations	GUTIERREZ, Eduardo
5:15 PM	[104] Multi-messenger emissions from magnetar remnants of binary neutron star mergers	MUKHOPADHYAY, Mainak

## Parallel Session: Neutrino Astrophysics - 401 (4:00 PM - 5:30 PM)

-Conveners: Bei Zhou; Qinrui Liu

time	[id] title	presenter
4:00 PM	[165] The TRIDENT Deep-sea Neutrino Telescope	XU, Donglian
4:15 PM	[112] Status of the Trinity PeV Neutrino Observatory	OTTE, Nepomuk
4:30 PM	[103] Improved directional uncertainties for IceCube realtime alerts	YUAN, Tianlu
4:45 PM	[189] Probing the Cross Correlation of IceCube Neutrinos with Tracers of Large Scale Structure	GUEVEL, David
5:00 PM	[107] The very-high-energy neutrino diffuse emission and the contribution of sources to the IceCube and ANTARES measurements	VECCHIOTTI, Vittoria
5:15 PM	[194] Neutrinos and gamma-rays from Galaxy Clusters constrained by the upper limits of IceCube	Dr HUSSAIN, Saqib

## Parallel Session: Particle Physics/Cosmology - 301 (4:00 PM - 5:30 PM)

-Conveners: Xucheng Gan; Huangyu Xiao

time	[id] title	presenter
4:00 PM	[85] Dark Spiky Primordial Black Holes	Dr IRELAND, Aurora
4:15 PM	[50] Building Dark Structure Before Big Bang Nucleosynthesis	DIAMOND, Melissa
4:30 PM	[39] A Ratio Preserving Approach to Cosmological Concordance	GREENE, Kylar
4:45 PM	[256] Neutrinos in Lake Geneva: Measuring the LHCb Forward Neutrino Flux with Large-Scale Detectors	KAMP, Nicholas