



# 9th International Conference on New Frontiers in Physics (ICNFP 2020)

## Saturday 5 September 2020

### Parallel session - Room 2 (12:40 - 13:30)

time	[id] title	presenter
12:40	[104] Quantum noise reduction in Advanced Virgo	SEQUINO, Valeria
13:05	[105] Small scale suspended interferometer for ponderomotive squeezing as test bench for EPR squeezer integration in Advanced Virgo	GIACOPPO, Laura

### Parallel session: A High Energy Particle Physics - Room 3 (12:40 - 13:30)

time	[id] title	presenter
12:40	[165] Rydberg positronium for pulsed antihydrogen production	CARAVITA, Ruggero
13:05	[160] Observation of a strong diocotron instability in an antiproton plasma ring and ``tailoring" of pure electron plasmas in the strong drive regime	TIETJE, Ingmari Christa

### Parallel session: Cosmology, Astrophysics, Gravity, Mathematical Physics - Room 1 (12:40 - 13:30)

time	[id] title	presenter
12:40	[5] The Physics Program of the PADME Experiment	OLIVA, Federica
13:05	[6] The PADME Detector	TARUGGI, Clara

## Tuesday 8 September 2020

### Parallel session: Cosmology, Astrophysics, Gravity, Mathematical Physics - Room 3 (11:00 - 13:30)

time	[id] title	presenter
11:00	[178] AugerPrime - The upgrade of the Pierre Auger Observatory	STASIELAK, Jaroslaw
11:25	[134] "Physics prospects with DAMIC-M"	KILMINSTER, Ben
11:50	[77] Particle physics in cosmic rays	Dr GORA, Dariusz
12:15	[73] Anisotropies in the arrival directions of ultra-high-energy cosmic rays measured at the Pierre Auger Observatory	BISTER, Teresa
12:40	[175] Telescope Array Summary	LUNDQUIST, Jon Paul
13:05	[75] Enhancing the understanding of fragmentation processes in hadrontherapy and radioprotection in space with the FOOT experiment	COLOMBI, Sofia

### Parallel session: High Energy Particle Physics - Room 2 (11:00 - 13:30)

time	[id] title	presenter
11:00	[205] Pushing the Frontier in Measuring the Mass of the Lightest Lepton: Results from the Karlsruhe Tritium Neutrino Experiment	SCHLÖSSER, Magnus
11:25	[22] The physics potentials of JUNO	Mr LU, Haoqi
11:50	[193] Latest Results from the Daya Bay Experiment	DOHNAL, Tadeas
12:15	[223] Searches for the neutrinoless double beta decay with GERDA – latest results.	ZUZEL, Grzegorz
12:40	[180] Neutrino Oscillation Results from the MINOS+ Experiment	Dr HOLIN, Anna

### Parallel session: Multidisciplinary Session - Room 1 (11:00 - 11:50)

time	[id] title	presenter
11:00	[143] Studies of low-energy $K^{\pm}$ - nucleus/nuclei interactions with light nuclei by AMADEUS	SKURZOK, Magdalena
11:25	[183] Partial wave analysis of $J/\psi \rightarrow K^+ K^- \pi^0$	DENISENKO, Igor

### Parallel session: Cosmology, Astrophysics, Gravity, Mathematical Physics - Room 1 (16:30 - 18:10)

time	[id] title	presenter
16:30	[190] Latest results from LUNA experiment	BARILE, Francesco
16:55	[204] New results from the CUORE experiment	Dr NUTINI, Irene
17:20	[131] Measurement of CNO neutrinos with Borexino	POCAR, Andrea
17:45	[153] Status of the MAJORANA DEMONSTRATOR experiment	Dr MASSARCZYK, Ralph

### Parallel session: High Energy Particle Physics - Room 3 (16:30 - 18:10)

time	[id] title	presenter
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16:30	[195] Azimuthal asymmetries and transverse momentum dependent distributions of charged hadrons at COMPASS	MORETTI, Andrea
16:55	[200] Study of double $J/\psi$ production mechanisms at COMPASS	GRIDIN, Andrei
17:20	[226] The wake of jets from linearized hydrodynamics	Dr YAO, Xiaojun

## Wednesday 9 September 2020

### Parallel session: Cosmology, Astrophysics, Gravity, Mathematical Physics - Room 3 (11:00 - 11:50)

time	[id] title	presenter
11:00	[74] The SABRE experiment	ZANI, Andrea
11:25	[106] DAMIC results on WIMP search with 11kg.day	GAIOR, Romain

### Parallel session: High Energy Particle Physics - Room 1 (11:00 - 11:50)

time	[id] title	presenter
11:00	[102] New result on the search for the $K^+ \rightarrow \pi^+ \nu \bar{\nu}$ decay at the NA62 experiment at CERN	MARTELOTTI, Silvia
11:30	[101] New measurement of the $K^+ \rightarrow \pi^+ \mu^+ \mu^-$ decay at NA62	MADIGOZHIN, Dmitri

# Thursday 1 October 2020

## Parallel session: Cosmology, Astrophysics, Gravity, Mathematical Physics - Room 2 (16:35 - 17:25)

time	[id] title	presenter
16:35	[277] The ADAMO Project for the Dark Matter Directionality Approach	Dr CARACCILO, Vincenzo
17:00	[279] Superluminality in beyond Horndeski theory with extra matter	VOLKOVA, Victoria

## Parallel session: High Energy Particle Physics - Room 1 (17:00 - 17:50)

time	[id] title	presenter
17:00	[275] Double beta decay of $^{150}\text{Nd}$ on excited levels of $^{150}\text{Sm}$	POLISCHUK, Oksana
17:25	[278] Search for double beta decay of $^{106}\text{Cd}$	KLAVDIENKO, V.R.

## Friday 2 October 2020

### **Parallel session: Heavy Ion Collisions and Critical Phenomena - Room 1 (14:00 - 15:20)**

time	[id] title	presenter
14:00	[255] Search for identical bands on the basis of level spin in SD nuclei	JAIN, Poonam
14:25	[273] Spatiotemporal structure of the pion emission in Au+Au collisions at $\sqrt{s} = 19.6$ GeV in UrQMD model	KRAVCHENKO, Yevhen
14:50	[257] Jet production and fragmentation at colliders (from HERA to EIC)	SHABETAI, Alexandre

### **Parallel session: Heavy Ion Collisions and Critical Phenomena - Room 2 (14:00 - 14:25)**

time	[id] title	presenter
14:00	[234] Renormalization group analysis of strongly anisotropic self-organized critical system subjected to isotropic turbulent flow	Dr GULITSKIY, Nikolay

### **Parallel session: High Energy Particle Physics - Room 2 (14:25 - 14:50)**

time	[id] title	presenter
14:25	[287] Resonant production of Higgs and electroweak boson pairs as a signature of massive sgoldstinos at the LHC	Ms KRIUKOVA, Ekaterina

### **Parallel session: Quantum Physics, Quantum Optics and Quantum Information - Room 2 (14:50 - 15:15)**

time	[id] title	presenter
14:50	[280] Computing knot invariants on a quantum computer	MIRONOV, Sergey