

ICPS 2024

Sunday, August 4, 2024 - Sunday, August 11, 2024

Free University of Tbilisi
Program

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Sunday, August 4, 2024

Arrival (7:30 AM - 1:00 PM)

Transportation and Registration (1:00 PM - 7:00 PM)

Opening Ceremony and Georgian Evening (7:00 PM - 11:00 PM)

Monday, August 5, 2024

Breakfast (6:30 AM - 8:00 AM)

Transportation (8:00 AM - 9:30 AM)

Guest Speakers: Gia Dvali - Magnum (9:30 AM - 11:00 AM)

time	[id] title	presenter
9:30 AM	[192] What is gravity?	Prof. DVALI, Gia

Coffee Break (11:00 AM - 11:30 AM)

Student Lectures (Astrophysics, Astronomy, Cosmology): AAC-01 - 322 (11:30 AM - 1:30 PM)

time	[id] title	presenter
11:30 AM	[4] Photocenter shifts caused by magnetic activity	SÁGI, Petra
11:50 AM	[11] Orbital dynamics in galactic potentials subjected to parameter drift	ILLÉS, Eduárd
12:10 PM	[13] Nanosecond time synchronization of distributed detectors	SEYFFERT, Yan
12:30 PM	[67] Identifying mass transfer stars from age abundance outliers	FRAZER, Polly
12:50 PM	[204] Detecting Moon and Sun Shadows in Cosmic-Ray Muons: KM3NeT/ORCA's Observational Breakthrough	MKLAVASHVILI, Irma

Student Lectures (Computational Methods for Physics Applications): CMPA-01 - 219 (11:30 AM - 1:30 PM)

time	[id] title	presenter
11:30 AM	[23] Mobility dynamics during the SARS-COV-2 pandemics across different levels of imposed measures	STUPAR, Nikola
11:50 AM	[33] Deciphering Complexity: Machine Learning Insights into Chaotic Dynamical Systems	OSMANOV, Lazare
12:10 PM	[46] Synchronization of Oscillators in a Fluid	SILVA, Francisco
12:30 PM	[81] Improving MCMC sampling efficiency with normalizing flows	WEBER, Willy

Student Lectures (Optics and Lasers): OL-01 - 418 (11:30 AM - 1:30 PM)

time	[id] title	presenter
11:50 AM	[103] Trapping light at the nanoscale with 2D materials	NÚÑEZ, Andrés
12:10 PM	[142] Preparation and Characterization of Gold Nanoparticles Using Nanosecond Laser Ablation at Different Wavelengths	ESKIN, Roza Mercan
12:30 PM	[144] Ultrafast pulses and time-resolved spectroscopy of molecular crystals	SCHWARZL, Robert
12:50 PM	[147] Thermodynamic theory of multimoded nonlinear photonic systems	SHUKAKIDZE, Alexander

Lunch (1:30 PM - 2:30 PM)

Workshops: Zurab Guguchia - Magnum (2:30 PM - 3:30 PM)

time	[id] title	presenter
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2:30 PM	[198] Time-Reversal Symmetry-Breaking in Charge-Ordered Kagome-Lattice Systems Probed with Muon Spin Rotation	Dr GUGUCHIA, Zurab
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Workshops: Peter Van Arkel - Magnum (3:30 PM - 4:30 PM)

Icebreaker / Student Mixer (4:30 PM - 7:30 PM)

Dinner (7:30 PM - 9:30 PM)

Game Night - Library (9:30 PM - 11:00 PM)

Tuesday, August 6, 2024

Breakfast (6:30 AM - 8:30 AM)

Transportation (8:30 AM - 9:30 AM)

Guest Speakers: Stefaan Poedts - Magnum (9:30 AM - 11:00 AM)

time	[id] title	presenter
9:30 AM	[194] Space weather predictions: state of the art and challenges	Prof. POEDTS, Stefaan

Coffee Break (11:00 AM - 11:30 AM)

Student Lectures (Astrophysics, Astronomy, Cosmology): AAC-02 - 200 (11:30 AM - 1:30 PM)

time	[id] title	presenter
11:30 AM	[108] Long-time Analysis of High Energy Gamma Ray Signals from Active Galactic Nuclei Jets with the MAGIC Telescopes	WALTHER, Cyrus
11:50 AM	[40] Investigating the Formation of Heavy Elements in Neutron Star Collisions and Rapid Neutron Capture Process	KARIMI, sara
12:10 PM	[53] Anomalies of the Earth's magnetic field caused by meteorite impacts	Mr ZAWADZKI, Mikołaj
12:30 PM	[15] Measuring Fast Radio Burst (FRB) Scintillations Using CHIME Catalog1 Data	SINGH, Anant
12:50 PM	[73] The Effects of Ultra-Light Axions on Cosmological Structure Formation	HADDADI, Kasra
1:10 PM	[157] Maximal Energy of Centrifugally Accelerated Electrons Near Primordial Black Holes	MALTSEV, Nikolai

Student Lectures (Condensed Matter and Solid State Physics): CMSSP-01 - 418 (11:30 AM - 1:30 PM)

time	[id] title	presenter
11:30 AM	[47] Lissajous figures in a quantum walk on a lattice	JACZEWSKI, Grzegorz
11:50 AM	[57] NV-diamond based wide-field camera and physics-informed neural network approach for analysing biomagnetic sources	FLAKS, Mykhailo
12:10 PM	[70] Nanowire-based Single Photon Sources	KAZYDUB, Denis
12:30 PM	[148] Extended XY model with n-(n+3) interaction	GOGABERISHVILI, Giorgi KURDADZE, Nika
12:50 PM	[88] Extended XY model with four-spin interaction	GOGABERISHVILI, Giorgi
1:10 PM	[202] Enhancing properties of rare-earth-based double perovskites (R ₂ NiMnO ₆ , R = Er, Nd) through synthesis procedure optimization	ANDRADE, Leonor

Student Lectures (High Energy Physics): HEP-01 - 219 (11:30 AM - 1:30 PM)

time	[id] title	presenter
11:30 AM	[30] CFL quark stars as a candidate for the HESS J1731-347 object with a trace anomaly and GW190814 bound implementation	Mr OIKONOMOU, Pavlos
11:50 AM	[50] The effect of axion exchange on the energy of multi-charged ions	Mr ABDULLIN, Rinat
12:10 PM	[173] Opening up baryon number violating operators	SOKHASHVILI, Diana

12:30 PM	[102] The Quark Propagator for Timelike Momenta	HALBWEDL, Felix
12:50 PM	[145] Electron motion and Landau levels in Dirac monopole magnetic fields	Mr KOPADZE, Luka

Lunch (1:30 PM - 2:30 PM)**Workshops: Adam Finley - Magnum (2:30 PM - 3:30 PM)**

time	[id] title	presenter
2:30 PM	[200] Journey towards the Sun: how modern space missions are revolutionising solar physics	Dr FINLEY, Adam J.

Tutorials: 01 - 219 (3:30 PM - 5:30 PM)

time	[id] title	presenter
3:30 PM	[66] Mastering Professional Tools for Physicists: CVs, Cover Letters, and LinkedIn Optimization	PORRON ALVAREZ, Manuel
4:30 PM	[84] Vitals for the young scientist	KUPREEV, Egor KORZHEVA, Elizaveta KHAFIZOV, Kamil VESELOVA, Polina

Tutorials: 02 - 224 (3:30 PM - 5:30 PM)

time	[id] title	presenter
3:30 PM	[58] I want to break symmetry	SCHÄFER, Hannah PENNERS, Miriam

Tutorials: 03 - 322 (3:30 PM - 5:30 PM)

time	[id] title	presenter
3:30 PM	[141] Solving Differential Equations Using Lie Groups	GÜN, ismail Deniz

Tutorials: 04 - 418 (3:30 PM - 5:30 PM)

time	[id] title	presenter
3:30 PM	[25] Taming systematic uncertainties in experimental physics analyses.	ALEXANDRIS, Georgios

Poster Sessions (Astrophysics, Astronomy, Cosmology): AAC-P-01 (5:30 PM - 6:30 PM)

[id] title	presenter	board
[205] 2024 Polymele Occultation and Convex Form Model of Asteroid 298 Baptistina	LÓPEZ ESPINOZA, Sabina	
[2] A Study of the Connection Between the Redshift Distribution of Long GRBs and the Star Formation Rate	HASAN, Ali	AAC-P-03
[107] Exoplanets: The Astronomy Revolution	PERALTA FUENTES, Manuel	AAC-P-05
[37] Investigating the Formation of Heavy Elements in Neutron Star Collisions and Rapid Neutron Capture Process	KARIMI, sara	AAC-P-07
[51] The stellar populations trapped at the L4/L5 Lagrange (corotation) points of a bar	BORG, Francesca	AAC-P-11

[271] The KM3NeT project	KISTAURI, Giorgi	ACC-F-09
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Poster Sessions (Biophysics): Bph-P-01 (5:30 PM - 6:30 PM)

[id] title	presenter	board
[9] Molecularly Informed Mesoscopic Modeling of Biological Lipid Membranes: A Phase-Field Based Multiscale Approach	ROGALLA, Pascal	Bph-P-02
[94] Plastic Waste & Human Health	PITKÄNEN, Aada	Bph-P-04

Poster Sessions (Computational Methods for Physics Applications): CMPA-P-01 (5:30 PM - 6:30 PM)

[id] title	presenter	board
[95] Classification and Prediction of extreme events in complex time series - Application to electricity price data	LANGE, Jan	CMPA-P-02
[153] Mechanical Properties of Mexico	PLASCENCIA VILLASEÑOR, Alondra Mariana MENDEZ, Miranda	CMPA-P-04
[134] Meshing Around: Unstructured Spherical Centroidal Voronoi Tessellation Mesh Grids For Better High-Resolution Numerical Weather Prediction	LOH, Viktor	CMPA-P-06
[161] Parameterisation and Performance Limits of Indoor Photovoltaic Modules	AHMED, Shimra	CMPA-P-08
[169] Python Physics Power	Mr OUNNASER, fatimzahrae	CMPA-P-10

Poster Sessions (Condensed Matter and Solid State Physics): CMSSP-P-01 (5:30 PM - 6:30 PM)

[id] title	presenter	board
[118] Investigating Nanoscale Joule Heating in Lithium Niobate Memristors	WARD, Ciara	CMSSP-P-02
[10] Light-driven interlayer propagation of collective-mode excitations in layered superconductors	ZIEREIS, Niklas	CMSSP-P-04
[20] Microstructure and thermal properties of modified polyethylenes	RINGELHAN, Lea	CMSSP-P-06

Poster Sessions (Earth Sciences): ES-P-01 (5:30 PM - 6:30 PM)

[id] title	presenter	board
[86] ANALYSIS OF PARTICULATE MATTER PM2.5 AND PM10 OVER DIFFERENT REGIONS OF NEPAL	KAINI, Shreedip	ES-P-01
[34] Geophysical Investigations of Mining Waste Heaps in the RAF Project	Mr NIEŚCIOR, Norbert	ES-P-03
[19] Machine Learning for natural dangerous event evaluation in certain region of Georgia	PALAVANDISHVILI, Ana	ES-P-05

Poster Sessions (High Energy Physics): HEP-P-01 (5:30 PM - 6:30 PM)

[id] title	presenter	board
[170] Conformal parametrization of the pion vector form factor	AKDAG, Melisa-Melek	HEP-P-02
[75] Electromagnetic interactions between charged spectators and participants in heavy-ion collisions	SZOSTAK, Alicja	HEP-P-04
[68] Properties of doubly heavy spin 1/2 baryons	SHEKARI TOUSI, Marzieh	HEP-P-06

Poster Sessions (Interdisciplinary/Other): ID-P-01 (5:30 PM - 6:30 PM)

[id] title	presenter	board
[122] A Novel 3D Printed Anatomical Prostate Phantom for Investigating Advanced Imaging in Radiotherapy	MCHUGH, Ciara	ID-P-02
[110] Features of monitoring the state of liquid flow by nuclear magnetic resonance using the modulation technique to record the NMR signal	KLIMOVA, Sofia	ID-P-04

Poster Sessions (Nuclear Physics): NP-P-01 (5:30 PM - 6:30 PM)

[id] title	presenter	board
[76] Study of the effects of multiple Coulomb scattering in a system of proportional chambers in an experiment on precision measurement of the proton radius in ep-scattering	Ms KRIVOVYAZENKO, Polina	NP-P-01
[18] The Plasma Window for Enhanced Particle Beam Transmission from Vacuum to Atmosphere	RUIMI, Ophir	NP-P-03

Poster Sessions (Optics and Lasers): OL-P-01 (5:30 PM - 6:30 PM)

[id] title	presenter	board
[8] Emergence of Synchronisation in a Driven-Dissipative Hot Rydberg Vapour	WADENPFUHL, Karen	OL-P-01
[146] We want to build optical senses for brain imaging	POLLACK, Anke	OL-P-03

Poster Sessions (Quantum Technology): QT-P-01 (5:30 PM - 6:30 PM)

[id] title	presenter	board
[133] Domain location on circular spin arrays	MALQUI CRUZ, Misael Samir	QT-P-01
[52] Generation of Non-classical States Using Optomechanics	SHOAB, Urwa	QT-P-03
[90] Towards quantum many-body physics with highly magnetic atoms of Dysprosium	RIEGER, Maurice	QT-P-05

Poster Sessions (Astrophysics, Astronomy, Cosmology): AAC-P-02 (6:30 PM - 7:30 PM)

[id] title	presenter	board
[150] Investigation of the influence of an updated model for the extragalactic background light on the multi-messenger signatures of Blazar 3C279 with CRPropa	SCHMIDT, Yannick	AAC-P-02
[160] Modelling of diffusion: observations in Fermi acceleration	ASLAMAZISHVILI, Mariam	AAC-P-04
[137] Network parameters of flaring and non-flaring active regions in the solar magnetogram	Ms ZIAEI, Shervin	AAC-P-06
[120] Silent messengers of the universe - a dive into neutrino astrophysics	STĘPIEŃ, Aleksandra	AAC-P-08
[149] The Impact of the Temporal Luminosity Evolution on the Signal of Ultra-High-Energy Cosmic Rays	LITWIN, Magdalena	AAC-P-10

Poster Sessions (Biophysics): Bph-P-02 (6:30 PM - 7:30 PM)

[id] title	presenter	board
[119] EFFECTS OF NON-THERMAL PLASMA TREATMENT ON SEED GERMINATION AND SEEDLING DEVELOPMENT OF CUCUMBER (Cucumis Sativus) AND CORIANDER(Coriandrum sativum)	SHARMA, Subhash	Bph-P-01

[36] Instabilities in ferrofluids modulated by external magnetic field	GUPTA, Akshat	Bph-P-03
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Poster Sessions (Computational Methods for Physics Applications): CMPA-P-02 (6:30 PM - 7:30 PM)

[id] title	presenter	board
[105] A Review of Machine Learning Techniques for Modeling Turbulence in Fluids	SIELAFF, Magdalena	CMPA-P-01
[152] Mechanical Properties of Mexico	PLASCENCIA VILLASEÑOR, Alondra Mariana MENDEZ, Miranda	CMPA-P-03
[164] Modelling of Diffusion: Langevin equation	DZIGUA, Salome	CMPA-P-05
[162] Modelling of Diffusion: Simple Anomalous Diffusion	KEZUA, Luka	CMPA-P-07
[60] Optimization of beam emission spectroscopy modelling with extreme learning machines	KARACSONYI, Mate	CMPA-P-09

Poster Sessions (Condensed Matter and Solid State Physics): CMSSP-P-02 (6:30 PM - 7:30 PM)

[id] title	presenter	board
[140] Copper nanoparticles in aluminum matrix at elevated temperatures	Ms CHOCHOLAKOVÁ, Elena	CMSSP-P-01
[14] Mechanical Properties of GaN Nanowires	KAZYDUB, Denis	CMSSP-P-03
[166] Theoretical approaches for predicting core-level binding energies	SCHÜTT, Pauline	CMSSP-P-05

Poster Sessions (Earth Sciences): ES-P-02 (6:30 PM - 7:30 PM)

[id] title	presenter	board
[89] Atmospheric Boundary Layer	PAPAGRIGORIOU, Giorgos	ES-P-02
[165] Sensitivity of the resolved atmospheric gravity waves on the model configuration	ŠINKONIS, Viačeslavas	ES-P-04

Poster Sessions (High Energy Physics): HEP-P-02 (6:30 PM - 7:30 PM)

[id] title	presenter	board
[65] Magnetic Resonance Spectroscopy in the CASPEr Dark Matter Experiment	RUIMI, Ophir	HEP-P-01
[12] Spontaneous Symmetry Breaking and Goldstone Theorem	Ms SZYMAŃSKA, Emilia	HEP-P-03
[190] The God Particle - Higgs Boson at the LHC	SAINI, Priyanka	HEP-P-05
[62] Towards a new parametrization for tensor- and axial-vector-meson transition form factors	LYMPERIA DOU, Eirini SCHÄFER, Hannah	HEP-P-07

Poster Sessions (Interdisciplinary/Other): ID-P-02 (6:30 PM - 7:30 PM)

[id] title	presenter	board
[27] ICPS 2025	POPOVIĆ, Borko VASOVIĆ, Zlatan	ID-P-01
[176] Possible effect of GCR in long-term atmospheric emissions	UGULAVA, Zurabi	ID-P-03
[82] Test of homemade Solid-Phase Microextraction Fiber	PRZYBYŁA, Bogumiła	ID-P-05

Poster Sessions (Nuclear Physics): NP-P-02 (6:30 PM - 7:30 PM)

[id] title	presenter	board
[77] Precision measurement of the position of cathode wires in a system of proportional high-pressure chambers in an experiment to measure the charge radius of a proton in elastic electron-proton scattering.	FILATOV, Gennadii	NP-P-02
[121] Star in a jar - Farnsworth-Hirsch Fusor	Mr ŽELEŽNIK, Artur	NP-P-04

Poster Sessions (Optics and Lasers): OL-P-02 (6:30 PM - 7:30 PM)

[id] title	presenter	board
[179] High energy pulsed mode-locked normal dispersion thulium-doped all-fiber laser	Ms FENG, Tianxian	OL-P-02
[180] The effect of surface fluorine doping on the structure of a thin layer of SnO ₂ used as an electron transfer layer in optoelectronic devices	VAZVANI HASSANABADI, Mahdi	OL-P-04

Poster Sessions (Quantum Technology): QT-P-02 (6:30 PM - 7:30 PM)

[id] title	presenter	board
[143] Integrating Triboelectric Nanogenerators with TiO ₂ -based UV Photodetectors for Self-Powered Sensor Systems	TAHERKHANI, Maedeh	QT-P-02
[48] Quantum Error Correction criteria for Hybrid Quantum Systems	CARRIÓN LÓPEZ, Irene	QT-P-04

Dinner (7:30 PM - 8:30 PM)

Pub Crawl / Wine Testing (8:30 PM - 11:00 PM)

Wednesday, August 7, 2024

Breakfast (6:30 AM - 8:30 AM)

Transportation (8:30 AM - 9:30 AM)

Guest Speakers: Ulf-G. Meißner - Magnum (9:30 AM - 11:00 AM)

time	[id] title	presenter
9:30 AM	[196] The Atomic Nucleus as a Quantum Laboratory	Prof. MEISSNER, Ulf-G.

Coffee Break (11:00 AM - 11:30 AM)

Student Lectures (Astrophysics, Astronomy, Cosmology): AAC-03 - 200 (11:30 AM - 1:30 PM)

time	[id] title	presenter
11:30 AM	[79] Mini-Neptunes: super Earths or water worlds?	PERALTA FUENTES, Manuel
11:50 AM	[80] The energy and power of radiation emitted by primordial black holes.	KURTHSKALIA, Nikoloz
12:10 PM	[91] MHD INSTABILITIES IN SHEAR FLOWS OF ANISOTROPIC COSMIC PLASMAS. I. FIRE HOSE MODES	SAMADOV, Jannat
12:30 PM	[99] Enhancing Fermi-LAT Source Detection Through a Novel Denoising Technique	AKHONDI, Fatemeh
12:50 PM	[104] The effects of Solar Activity cycles on the asteroseismic parameters from 25 years of observations with GOLF and VIRGO on the ESA SOHO space telescope	Ms MICHELMAYER, Sabrina
1:10 PM	[106] The impact of Self-Interacting Dark Matter in dwarf galaxies	MESHVELIANI, Tamar

Student Lectures (Computational Methods for Physics Applications): CMPA-02 - 219 (11:30 AM - 1:30 PM)

time	[id] title	presenter
11:30 AM	[71] Bootstrapping Quantum Mechanics	TULEJA, Tomáš
11:50 AM	[159] Parameterisation and Performance Limits of Indoor Photovoltaic Modules	AHMED, Shimra
12:10 PM	[172] Mudflow Analysis using Generalized Rheological Equation and Cellular Automation on Lattice map	UGULAVA, Zurabi
12:30 PM	[203] Implications of the memory effect on stochastic resonance	MARTIASHVILI, Mariam
12:50 PM	[188] Non-equilibrium dynamics of Lennard-Jones systems	TSERETELI, Giorgi

Student Lectures (Interdisciplinary/Other): ID-01 - 418 (11:30 AM - 1:30 PM)

time	[id] title	presenter
11:30 AM	[1] Knowledge is Meant to be Communicated: Importance of Public Science Communication	HASAN, Ali
11:50 AM	[28] ICPS 2025	POPOVIĆ, Borko VASOVIĆ, Zlatan
12:10 PM	[17] The Plasma Window for Enhanced Particle Beam Transmission from Vacuum to Atmosphere	RUIMI, Ophir
12:30 PM	[35] Dissociative electron attachment to carbonates	KHARCHILAVA, Giorgi

12:50 PM	[54] The influence of solar radiation and atmospheric circulation on temperature anomalies in Warsaw	KACZOROWSKI, Filip
1:10 PM	[69] RAF - Analog Space Mission - The first analog space base on mining heaps	GODLEWSKA, Natalia

Lunch (1:30 PM - 2:30 PM)**Tutorials: 05 - 219 (2:30 PM - 3:30 PM)**

time	[id] title	presenter
2:30 PM	[24] Introduction to COMSOL - Modelling Nanostructures	KAZYDUB, Denis

Tutorials: 06 - 224 (2:30 PM - 3:30 PM)

time	[id] title	presenter
2:30 PM	[114] Introduction to latex	PAVLOV, Alexander RYBAK, Inna МЕЛЬНИЧУК, Анна

Tutorials: 07 - 322 (2:30 PM - 3:30 PM)

time	[id] title	presenter
2:30 PM	[117] TRIZ- Theory of inventive problem solving	KALMYKOVA, Aleksandra ZAGURENKO, Julia TSAREGORODTSEV, Mikhail

Tutorials: 08 - 418 (2:30 PM - 3:30 PM)

time	[id] title	presenter
2:30 PM	[273] School Day Workshop and TC India initiatives	GUPTA, Akshat SINGH, Anant SINGH, Deepanshi GUPTA, LAKSHAY

Guest Speakers: Lena Funcke - Magnum (3:30 PM - 5:00 PM)

time	[id] title	presenter
3:30 PM	[193] Quantum Algorithms for Particle Physics	Prof. FUNCKE, Lena

Sports and Board Games (5:00 PM - 7:30 PM)**Dinner (7:30 PM - 9:30 PM)****Free Night (bars, pubs, etc.) (9:30 PM - 11:00 PM)**

Thursday, August 8, 2024

Breakfast (6:30 AM - 8:30 AM)

Excursions (8:30 AM - 6:00 PM)

Transportation (6:00 PM - 7:30 PM)

Get Prepared (7:30 PM - 9:30 PM)

Nations Evening (9:30 PM - 11:00 PM)

Friday, August 9, 2024

Breakfast (6:30 AM - 8:30 AM)

Transportation (8:30 AM - 9:30 AM)

Guest Speakers: Ilya Nemenman - Magnum (9:30 AM - 11:00 AM)

time	[id] title	presenter
9:30 AM	[197] Emergent Laws of Physics and Biological Simplicity	Prof. NEMENMAN, Ilya

Coffee Break (11:00 AM - 11:30 AM)

Student Lectures (Astrophysics, Astronomy, Cosmology): AAC-04 - 200 (11:30 AM - 1:30 PM)

time	[id] title	presenter
11:30 AM	[113] relatively accelerated motion of a particle, on a spiral	GAPRINDASHVILI, Elene
11:50 AM	[124] Complex dynamics of ion acoustic and cyclotron waves	MIROTADZE, Irakli
12:10 PM	[127] Extra Tidal Region of Globular Cluster - 5466	SINGH, Deepanshi
12:30 PM	[128] Unveiling Hidden Gamma-Ray Sources: Discoveries with SEMIFIC III on Fermi-LAT Data	SOOR, Mehran
12:50 PM	[154] The Impact of Data Temporal Density on the Probability of Detecting Nearby Planets in Gravitational Microlensing Events	MADAKHEL, Nazanin
1:10 PM	[156] PBH overproduction bounds on LISA PT target sources	LOZANO JARQUE, Daniel

Student Lectures (Biophysics): Bph-01 - 219 (11:30 AM - 1:30 PM)

time	[id] title	presenter
11:30 AM	[7] New opportunity to look insight the viral world using optical methods	Mr KAPANADZE, Sergi
11:50 AM	[112] Embracing Machine Learning for Inverse Problems Based on Spectroscopy	Mr SOKOŁOWSKI, Marek
12:10 PM	[136] EEG/MEG source analysis of the visual evoked response	ABRAHAM, Zoé
12:30 PM	[185] On the possibility of existence of living organisms on pulsar exoplanets	RAMISHVILI, Nino
12:50 PM	[189] Exploring biological tissue through optical spectroscopy: Modelling and Experiment	TSULUKIDZE, Luka

Student Lectures (Quantum Technology): QT-01 - 418 (11:30 AM - 1:30 PM)

time	[id] title	presenter
11:30 AM	[100] Liouville equation on quantum computer	FREDON, Thibault
11:50 AM	[138] Integrating Triboelectric Nanogenerators with TiO ₂ -based UV Photodetectors for Self-Powered Sensor Systems	TAHERKHANI, Maedeh
12:10 PM	[175] Fabrication and Characterization of Graphene Quantum Dots: Investigation of Dopant Effects on Optical and Structural Properties	PAYANDEH, Amirhossein
12:30 PM	[181] Precision Gravity Gradient Sensing Using Magnon Systems	Mr NAJAFI, komeil

Lunch (1:30 PM - 2:30 PM)**Workshops: Giuliano CHIRIACÒ - Magnum (2:30 PM - 3:30 PM)**

time	[id] title	presenter
2:30 PM	[199] The revolution of quantum technologies: from quantum computing to cryptography	Dr CHIRIACÒ, Giuliano

Break (3:30 PM - 3:45 PM)**Panel Discussion: Panel Discussion - 200 (3:45 PM - 5:30 PM)****Poster Sessions (Astrophysics, Astronomy, Cosmology): AAC-P-03 (5:30 PM - 6:30 PM)**

[id] title	presenter	board
[255] Investigation of the influence of an updated model for the extragalactic background light on the multi-messenger signatures of Blazar 3C279 with CRPropa	SCHMIDT, Yannick	AAC-P-02
[258] Modelling of diffusion: observations in Fermi acceleration	ASLAMAZISHVILI, Mariam	AAC-P-04
[250] Network parameters of flaring and non-flaring active regions in the solar magnetogram	Ms ZIAEI, Shervin	AAC-P-06
[244] Silent messengers of the universe - a dive into neutrino astrophysics	STĘPIEŃ, Aleksandra	AAC-P-08
[254] The Impact of the Temporal Luminosity Evolution on the Signal of Ultra-High-Energy Cosmic Rays	LITWIN, Magdalena	AAC-P-10

Poster Sessions (Biophysics): Bph-P-03 (5:30 PM - 6:30 PM)

[id] title	presenter	board
[243] EFFECTS OF NON-THERMAL PLASMA TREATMENT ON SEED GERMINATION AND SEEDLING DEVELOPMENT OF CUCUMBER (Cucumis Sativus) AND CORIANDER(Coriandrum sativum)	SHARMA, Subhash	Bph-P-01
[220] Instabilities in ferrofluids modulated by external magnetic field	GUPTA, Akshat	Bph-P-03

Poster Sessions (Computational Methods for Physics Applications): CMPA-P-03 (5:30 PM - 6:30 PM)

[id] title	presenter	board
[239] A Review of Machine Learning Techniques for Modeling Turbulence in Fluids	SIELAFF, Magdalena	CMPA-P-01
[256] Mechanical Properties of Mexico	PLASCENCIA VILLASEÑOR, Alondra Mariana MENDEZ, Miranda	CMPA-P-03
[261] Modelling of Diffusion: Langevin equation	DZIGUA, Salome	CMPA-P-05
[260] Modelling of Diffusion: Simple Anomalous Diffusion	KEZUA, Luka	CMPA-P-07
[226] Optimization of beam emission spectroscopy modelling with extreme learning machines	KARACSONYI, Mate	CMPA-P-09

Poster Sessions (Condensed Matter and Solid State Physics): CMSSP-P-03 (5:30 PM - 6:30 PM)

[id] title	presenter	board
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[251] Copper nanoparticles in aluminum matrix at elevated temperatures	Ms CHOCHOLAKOVÁ, Elena	CMSS ^P -P-01
[214] Mechanical Properties of GaN Nanowires	KAZYDUB, Denis	CMSS ^P -P-03
[263] Theoretical approaches for predicting core-level binding energies	SCHÜTT, Pauline	CMSS ^P -P-05

Poster Sessions (Earth Sciences): ES-P-03 (5:30 PM - 6:30 PM)

[id] title	presenter	board
[235] Atmospheric Boundary Layer	PAPAGRIGORIOU, Giorgos	ES-P-02
[262] Sensitivity of the resolved atmospheric gravity waves on the model configuration	ŠINKONIS, Viačeslavas	ES-P-04

Poster Sessions (High Energy Physics): HEP-P-03 (5:30 PM - 6:30 PM)

[id] title	presenter	board
[228] Magnetic Resonance Spectroscopy in the CASPEr Dark Matter Experiment	RUIMI, Ophir	HEP-P-01
[213] Spontaneous Symmetry Breaking and Goldstone Theorem	Ms SZYMAŃSKA, Emilia	HEP-P-03
[269] The God Particle - Higgs Boson at the LHC	SAINI, Priyanka	HEP-P-05
[227] Towards a new parametrization for tensor- and axial-vector-meson transition form factors	LYMPERIOU, Eirini SCHÄFER, Hannah	HEP-P-07

Poster Sessions (Interdisciplinary/Other): ID-P-03 (5:30 PM - 6:30 PM)

[id] title	presenter	board
[218] ICPS 2025	POPOVIĆ, Borko VASOVIĆ, Zlatan	ID-P-01
[266] Possible effect of GCR in long-term atmospheric emissions	UGULAVA, Zurabi	ID-P-03
[233] Test of homemade Solid-Phase Microextraction Fiber	PRZYBYŁA, Bogumiła	ID-P-05

Poster Sessions (Nuclear Physics): NP-P-03 (5:30 PM - 6:30 PM)

[id] title	presenter	board
[232] Precision measurement of the position of cathode wires in a system of proportional high-pressure chambers in an experiment to measure the charge radius of a proton in elastic electron-proton scattering.	FILATOV, Gennadii	NP-P-02
[245] Star in a jar - Farnsworth-Hirsch Fusor	Mr ŽELEŽNIK, Artur	NP-P-04

Poster Sessions (Optics and Lasers): OL-P-03 (5:30 PM - 6:30 PM)

[id] title	presenter	board
[267] High energy pulsed mode-locked normal dispersion thulium-doped all-fiber laser	Ms FENG, Tianxian	OL-P-02
[268] The effect of surface fluorine doping on the structure of a thin layer of SnO ₂ used as an electron transfer layer in optoelectronic devices	VAZVANI HASSANABADI, Mahdi	OL-P-04

Poster Sessions (Quantum Technology): QT-P-03 (5:30 PM - 6:30 PM)

[id] title	presenter	board
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[252] Integrating Triboelectric Nanogenerators with TiO ₂ -based UV Photodetectors for Self-Powered Sensor Systems	TAHERKHANI, Maedeh	QT-P-02
[223] Quantum Error Correction criteria for Hybrid Quantum Systems	CARRIÓN LÓPEZ, Irene	QT-P-04

Poster Sessions (Astrophysics, Astronomy, Cosmology): AAC-P-04 (6:30 PM - 7:30 PM)

[id] title	presenter	board
[270] 2024 Polymele Occultation and Convex Form Model of Asteroid 298 Baptistina	LÓPEZ ESPINOZA, Sabina	AAC-P-01
[209] A Study of the Connection Between the Redshift Distribution of Long GRBs and the Star Formation Rate	HASAN, Ali	AAC-P-03
[240] Exoplanets: The Astronomy Revolution	PERALTA FUENTES, Manuel	AAC-P-05
[221] Investigating the Formation of Heavy Elements in Neutron Star Collisions and Rapid Neutron Capture Process	KARIMI, sara	AAC-P-07
[272] The KM3NeT project	KISTAURI, Giorgi	AAC-P-09
[224] The stellar populations trapped at the L4/L5 Lagrange (corotation) points of a bar	BORG, Francesca	AAC-P-11

Poster Sessions (Biophysics): Bph-P-04 (6:30 PM - 7:30 PM)

[id] title	presenter	board
[211] Molecularly Informed Mesoscopic Modeling of Biological Lipid Membranes: A Phase-Field Based Multiscale Approach	ROGALLA, Pascal	Bph-P-02
[237] Plastic Waste & Human Health	PITKÄNEN, Aada	Bph-P-04

Poster Sessions (Computational Methods for Physics Applications): CMPA-P-04 (6:30 PM - 7:30 PM)

[id] title	presenter	board
[238] Classification and Prediction of extreme events in complex time series - Application to electricity price data	LANGE, Jan	CMPA-P-02
[257] Mechanical Properties of Mexico	PLASCENCIA VILLASEÑOR, Alondra Mariana MENDEZ, Miranda	CMPA-P-04
[249] Meshing Around: Unstructured Spherical Centroidal Voronoi Tessellation Mesh Grids For Better High-Resolution Numerical Weather Prediction	LOH, Viktor	CMPA-P-06
[259] Parameterisation and Performance Limits of Indoor Photovoltaic Modules	AHMED, Shimra	CMPA-P-08
[264] Python Physics Power	Mr OUNNASER, fatimzahrae	CMPA-P-10

Poster Sessions (Condensed Matter and Solid State Physics): CMSSP-P-04 (6:30 PM - 7:30 PM)

[id] title	presenter	board
[242] Investigating Nanoscale Joule Heating in Lithium Niobate Memristors	WARD, Ciara	CMSSP-P-02
[212] Light-driven interlayer propagation of collective-mode excitations in layered superconductors	ZIEREIS, Niklas	CMSSP-P-04
[217] Microstructure and thermal properties of modified polyethylenes	RINGELHAN, Lea	CMSSP-P-06

Poster Sessions (Earth Sciences): ES-P-04 (6:30 PM - 7:30 PM)

[id] title	presenter	board
[234] ANALYSIS OF PARTICULATE MATTER PM2.5 AND PM10 OVER DIFFERENT REGIONS OF NEPAL	KAINI, Shreedip	ES-P-01
[219] Geophysical Investigations of Mining Waste Heaps in the RAF Project	Mr NIEŚCIOR, Norbert	ES-P-03
[216] Machine Learning for natural dangerous event evaluation in certain region of Georgia	PALAVANDISHVILI, Ana	ES-P-05

Poster Sessions (High Energy Physics): HEP-P-04 (6:30 PM - 7:30 PM)

[id] title	presenter	board
[265] Conformal parametrization of the pion vector form factor	AKDAG, Melisa-Melek	HEP-P-02
[230] Electromagnetic interactions between charged spectators and participants in heavy-ion collisions	SZOSTAK, Alicja	HEP-P-04
[229] Properties of doubly heavy spin 1/2 baryons	SHEKARI TOUSI, Marzieh	HEP-P-06

Poster Sessions (Interdisciplinary/Other): ID-P-04 (6:30 PM - 7:30 PM)

[id] title	presenter	board
[246] A Novel 3D Printed Anatomical Prostate Phantom for Investigating Advanced Imaging in Radiotherapy	MCHUGH, Ciara	ID-P-02
[241] Features of monitoring the state of liquid flow by nuclear magnetic resonance using the modulation technique to record the NMR signal	KLIMOVA, Sofia	ID-P-04

Poster Sessions (Nuclear Physics): NP-P-04 (6:30 PM - 7:30 PM)

[id] title	presenter	board
[231] Study of the effects of multiple Coulomb scattering in a system of proportional chambers in an experiment on precision measurement of the proton radius in ep-scattering	Ms KRIVOVYAZENKO, Polina	NP-P-01
[215] The Plasma Window for Enhanced Particle Beam Transmission from Vacuum to Atmosphere	RUIMI, Ophir	NP-P-03

Poster Sessions (Optics and Lasers): OL-P-04 (6:30 PM - 7:30 PM)

[id] title	presenter	board
[210] Emergence of Synchronisation in a Driven-Dissipative Hot Rydberg Vapour	WADENPFUHL, Karen	OL-P-01
[253] We want to build optical senses for brain imaging	POLLACK, Anke	OL-P-03

Poster Sessions (Quantum Technology): QT-P-04 (6:30 PM - 7:30 PM)

[id] title	presenter	board
[248] Domain location on circular spin arrays	MALQUI CRUZ, Misael Samir	QT-P-01
[225] Generation of Non-classical States Using Optomechanics	SHO AIB, Urwa	QT-P-03
[236] Towards quantum many-body physics with highly magnetic atoms of Dysprosium	RIEGER, Maurice	QT-P-05

Dinner (7:30 PM - 9:30 PM)

Talent Show (9:30 PM - 11:00 PM)

Saturday, August 10, 2024

Breakfast (6:30 AM - 8:30 AM)

Transportation (8:30 AM - 9:30 AM)

Guest Speakers: Anamaria Font - Magnum (9:30 AM - 11:00 AM)

time	[id] title	presenter
9:30 AM	[195] Symmetries and Phenomenology of Strings	Prof. FONT, Anamaria

Coffee Break (11:00 AM - 11:30 AM)

Student Lectures (Astrophysics, Astronomy, Cosmology): AAC-05 - 200 (11:30 AM - 1:30 PM)

time	[id] title	presenter
11:30 AM	[158] acoustics of relativistic Hagen-Poiseuille flow	CHKHIKVADZE, Giorgi
11:50 AM	[163] Coupling and mutual transformation of acoustic and gravitational modes in kinematically complex flows.	SARALIDZE, Ia
12:10 PM	[168] Maximal possible energies of electrons accelerated by the magnetic field of a rotating black hole	NIKURADZE, Nikoloz
12:30 PM	[174] Gamma ray bursts and their central engine of these bursts and some discussion on their accretion disks	MOKNATJOO, Ava
12:50 PM	[182] The Dynamics of Gravity Waves and Aperiodic Modes in Kinematically Complex Flows	CHKHARTISHVILI, Elene
1:10 PM	[183] On the Asymptotic Persistence of Langmuir Modes in Kinematically Complex Plasma Flows	Mrs ARABULI, Ketevan

Student Lectures (High Energy Physics): HEP-02 - 219 (11:30 AM - 1:30 PM)

time	[id] title	presenter
11:30 AM	[155] From Quarks to Cosmos : A Journey Through Particle Physics	SAINI, Priyanka
11:50 AM	[72] Study of b-quark production in ultra-peripheral heavy-ion collisions at the LHC	MAXIN, Filip
12:10 PM	[177] Geometric Formulation of Quantum Mechanics: Greening Quantum Gravity's Arid Spaces	Mr DADRAS, Amirhossein
12:30 PM	[187] Functional Representation of the S-Matrix in Liouville Theory	RAZMADZE, Lado
12:50 PM	[191] Diagonalization of four-fermionic interaction Hamiltonian on a sphere with magnetic monopole	MAMADASHVILI, Tamar
1:10 PM	[274] PLANCKS: From preliminaries to the competition	QUINLAN, Anthony

Student Lectures (Interdisciplinary/Other): ID-02 - 418 (11:30 AM - 1:30 PM)

time	[id] title	presenter
11:30 AM	[78] Non-linear longitudinal waves in Ferrite rod	Mr UGULAVA, Irakli
11:50 AM	[83] Relativistic Fluid Dynamics: A Study on Taylor Flow	GHELEKVA, ani
12:10 PM	[93] An application of XRF spectroscopy to heritage science - the case study of ancient roman building materials from Lebanon	SOKOŁOWSKI, Marcin

12:30 PM	[116] On the construction of harmonic functions with rational degrees of homogeneity in Euclidean space	Ms POSOKHOVA, Ekaterina
12:50 PM	[178] Obtaining various magnetic fields with a two-dimensional system of currents	TOIDZE, John
1:10 PM	[207] 2+1D Non-Hermitian chiral Majorana surface states in topological superconductor	GIORGADZE, Niko

Lunch (1:30 PM - 2:30 PM)

Workshops: Andria Rogava - Magnum (2:30 PM - 3:30 PM)

time	[id] title	presenter
2:30 PM	[201] Tennis Ball Towers: startling structures made of frictious spheres	Prof. ROGAVA, Andria

Sports and Board Games (3:30 PM - 6:30 PM)

Group Photo, Closing Ceremony and BBQ Evening (6:30 PM - 11:00 PM)

Sunday, August 11, 2024

Breakfast & Checkout (6:30 AM - 12:30 PM)

Departure (12:30 PM - 11:00 PM)