

ANPA Conference 2024 Schedule

Presentation Time:

Plenary: 45 minutes + 15 minutes Q/A
Invited: 25 minutes + 5 minutes Q/A
Contributed: 12 minutes + 3 minutes Q/A

Preferred Poster Size:

75 cm (horizontal) x 90 cm (vertical)

Time Convention:

(NT = Nepal Time; ET = US Eastern Time)

Friday, 7/19/2024 (Nepal)

Thursday, 7/18/2024 - Friday, 7/19/2024 (USA)

TU-CDP, Nepal Sessions

Session I: Plenary Session (Nepal)

Session Chair: Harishankar Mallik
Webex In Charge: Yogesh Maharjan

Time: 8:00 AM - 9:45 AM, NT (7/19/2024)
(10:15 PM 7/18 - 12:00 AM 7/19, ET)

WebEx Link: <https://anpaglobal.webex.com/anpaglobal/j.php?MTID=m846f2e1c97b9788250f58e06b172c3f1>

Time	Presenting Author	Title
8:00 AM - 8:30 AM, NT (10:15 PM - 10:45 PM, ET)		Registration
8:30 AM - 8:45 AM, NT (10:45 PM - 11:00 PM, ET)	Om Prakash Niroula	Welcome message by the Head of the Central Department of Physics, TU
8:45 AM - 9:45 AM, NT (11:00 PM - 12:00 AM (7/19), ET)	Narayan P. Chapagain (Plenary)	Space Weather at Low-Latitudes and Prospects of its Forecasting

Session II: Atomic, Molecular, Optical, and High Energy Physics

Session Chair: Harishankar Mallik
Webex In Charge: Yogesh Maharjan

Time: 9:45 AM - 10:30 AM, NT (7/19/2024)
(12:00 AM - 1:30 AM, ET) (7/19/2024)

WebEx Link: <https://anpaglobal.webex.com/anpaglobal/j.php?MTID=m846f2e1c97b9788250f58e06b172c3f1>

Time	Presenting Author	Title
9:45 AM - 10:00 AM, NT (12:00 AM - 12:15 AM, ET)	Roshan Chalise	Development and Characterization of Gliding Arc Plasma Jet (GAPJ)
10:00 AM - 10:15 AM, NT (12:15 AM - 12:30 AM, ET)	Santosh Dhungana	Electrical and Optical Characterization of Knife Shaped Gliding Arc Discharge (GAD) System and Its Application on PAW Production and Seed Treatment
10:15 AM - 10:30 AM, NT (12:30 AM - 12:45 AM, ET)	Devendra Raj Upadhyay	Attenuation of Photons, Neutrons, and Heavy Ions in Niobium Alloys for Accelerator Applications
10: 30 AM -10:45 AM	Break	

Session III: Applied and Biophysics

Session Chair: Yogesh Maharjan
Webex In Charge: Aman Ganeju

Time: 10:45 AM - 12:15 PM, NT (7/19/2024)
(1:00 AM - 2:30 AM, ET) (7/19/2024)

WebEx Link: <https://anpaglobal.webex.com/anpaglobal/j.php?MTID=m846f2e1c97b9788250f58e06b172c3f1>

10:45 AM - 11:00 AM, NT (1:00 AM - 1:15 AM, ET)	Bed Prasad Pandey	High Speed Application of Source Pocket Hetero-Dielectric Double Gate TFETs
11:00 AM - 11:15 AM, NT (1:15 AM - 1:30 AM, ET)	Santosh Kumar Pandit	Simulation, modeling and optimization of Source Pocket- Based Hetero-Dielectric Double- Gate TFETs for enhanced performance.
11:15 AM - 11:30 AM, NT (1:30 AM - 1:45 AM, ET)	Saddam Husain Dhobi	Effect of Thermal Quantum Species Screening on Fuel Cell Performance
11:30 AM - 11:45 AM, NT (1:45 AM - 2:00 AM, ET)	Leo Dyaji	Innovations in Green Chemistry for Minimizing Environmental Impact and Promoting Sustainable Product Design
11:45 AM - 12:00 PM, NT (2:00 AM - 2:15 AM, ET)	Hari Shankar Mallik	Level crossing resonance studies of derivatives of hemoglobin using muon
12:00 PM - 12:15 PM, NT (2:15 AM - 2:30 AM, ET)	Narayan Gautam	Characterizing HDAC7-MEF2A complex formation

Session IV: Poster Session

Session Chairs / Judges: Narayan Adhikari, Raju Khanal, and Hari Lamichhane

Time: 12:15 PM - 1:45 PM, NT (7/19/2024)

(2:30 AM - 4:00 AM, ET) (7/19/2024)

WebEx Link: <https://anpaglobal.webex.com/anpaglobal/j.php?MTID=m846f2e1c97b9788250f58e06b172c3f1>

Time	Presenting Author	Title
12:15 PM - 1:45 PM, NT (2:30 AM - 4:00 AM, ET)	Binaya Chandra Pokhrel	Deciphering Atomic Polarization Effects on Energy Dynamics and Output Voltage in Proton Exchange Membrane Fuel Cells
	Aman Kumar Rai	Ion Flow, Sheath Characteristics, And Dust Dynamics Of Lunar Dusty Plasma With Superthermal Electrons
	Kashi Ram Panday	Adsorption Of Kharidhunga (Talcstone) And Kameromato (Clay) In Distilled Water And Acetone
	Nisha Kaucha	Characterization Of Cold Atmospheric Plasma: Production Of Reactive Species And Its Antibacterial Properties.
	Ramesh Khanal	Plasma-Wall Interaction Mechanism And Dust Particles Charging For Magnetized Plasma Exposed With Tungsten And Carbon Electron Emitting Surfaces
	Samjhana Dahal	Germination And Seedling Growth Enhancement Of Timur Seed (Zanthoxylum Armatum) By Using Cold Atmospheric Pressure Plasma
	Saroj Pandeya	Oblique Propagation Of Dust-Ion Acoustic Waves In 3d3v Quantum Magnetized Dusty Plasma With Electron Pressure Anisotropy
	Bikal Khanal	A Review on Machine Learning for Design, Discovery and Properties of Energy Materials
	Damodar Neupane	Comparative Study of Titanium Dioxide and Lysozyme-Doped Titanium Dioxide Nanoparticles for Enhanced Photocatalytic Degradation
	Dikshya Chand	Development of Non-Enzymatic Glucose Biosensor using Cobalt Oxide Thin Film
	Dipak Oli	First Principles Study Of Undoped And Halogen Doped ZnO Monolayer
	Kedar Nath Jaiswal	Electronic and Optical Property Tuning by Chlorine Doping on Oxyhalide Bi ₂ LaO ₄ I

	Manisha Rai	STUDY ON POROUS Al DOPED ZnO THIN FILM AS A GLUCOSE BIOSENSOR
	Meenashree Khanal	Effect of UV light on impedance spectrum of the pure and Ag-doped ZnO film
	Pawan Joshi	Electronic and Thermoelectric Properties of Kagome Rb ₂ Pt ₃ S ₄
	Sabita Pandey	Electronic and Magnetic Properties of Honeycomb Layered Oxide: Na ₃ Mn ₂ SbO ₆
	Aatiz Ghimire	Deep Learning Technique for Forest Fire Detection using Satellite Imagery
	Ambika Shahi	Prediction of Lattice Parameter and Formation Energy of Cubic Semi-Heusler Alloys
	Gokarna Banjade	PREDICTION OF NEPAL'S 2021 EARTHQUAKE TREND USING SCALED INPUT IN A 4-LAYER LSTM MODEL.
	Keshab Chaudhary, Dipendra Prasad Kalauni	Machine Learning Driven Formation Energy and Lattice Parameter Prediction of Full Heusler Alloys: X ₂ YZ
	Pratiksha Khanal	Predicting the Lattice Parameters of Transition Metal Halides - MX _n via Machine Learning
	Pratima Khadka	Machine Learning Driven Prediction of Formation Energy and Band Gap of AxMyM'zO ₆ Oxides

Session V: Condensed Matter Physics and Materials Science

Session Chair: Madhav Prasad Ghimire

Webex In Charge: Divash Rai

Time: 1:45 PM - 3:15 PM, NT (7/19/2024)

(4:00 AM - 5:30 AM, ET) (7/19/2024)

WebEx Link: <https://anpaglobal.webex.com/anpaglobal/j.php?MTID=m846f2e1c97b9788250f58e06b172c3f1>

Time	Presenting Author	Title
1:45 PM - 2:15 PM, NT (4:00 AM - 4:30 AM, ET)	Chiranjib Mitra (Invited)	Topological Photo-current and magnetization control in 3D Topological Insulators
2:15 PM - 2:30 PM, NT (4:30 AM - 4:45 AM, ET)	Deergh Bahadur Shahi	Thickness Dependent Electronic Properties and Cleavage energy of Pt ₂ HgSe ₃
2:30 PM - 2:45 PM, NT (4:45 AM - 5:00 AM, ET)	Dipak Bhattarai	Electronic Structure and Anomalous Hall Conductivity of Magnetic Weyl Ferromagnet Bi ₂ TeMnI ₂

2:45 PM - 3:00 PM, NT (5:00 AM - 5:15 AM, ET)	Mithilesh Kumar Jha	Computational Study on Electrical Properties of NiPtCu Solid Ternary Alloy
3:00 PM - 3:15 PM, NT (5:15 AM - 5:30 AM, ET)	Sarita Lawaju	Layered Honeycomb Oxides: Possible Candidates for Energy Storage
3:15 PM - 3:30 PM, NT (5:30 AM - 5:45 AM, ET)	Break	
Session VI: Atmospheric - Astro - Space - Cosmic Physics Session Chair: Binod Adhikari Webex In Charge: Aman Ganeju Time: 3:30 PM - 5:15 PM, NT (7/19/2024) (5:45 AM - 7:30 AM, ET) (7/19/2024) WebEx Link: https://anpaglobal.webex.com/anpaglobal/j.php?MTID=m846f2e1c97b9788250f58e06b172c3f1		
3:30 PM - 4:00 PM, NT (5:45 AM - 6:15 AM, ET)	Ram Prasad Regmi (Invited)	Air Pollution Transport and Formation of Pollutant Fields Over the Major Urban Centers in the Complex Terrain of Nepal Himalayan: Prospects of Ensuring National Ambient Air Quality Standard
4:00 PM - 4:15 PM, NT (6:15 AM - 6:30 AM, ET)	Lok Nath Sharma	Ionospheric variations during the geomagnetic storms of March and April 2023 in Jeju Island, South Korea
4:15 PM - 4:30 PM, NT (6:30 AM - 6:45 AM, ET)	Madhu Sudan Paudel	Seasonal Tropopause Dynamics over Nepal from 2022 to 2023: Insights from GNSS-RO Observations
4:30 PM - 4:45 PM, NT (6:45 AM - 7:00 AM, ET)	Prakash Man Shrestha	Temporal variability of Solar Radiation and Atmospheric Turbidity on Jomsom on Wavelet approach
4:45 PM - 5:00 PM, NT (7:00 AM - 7:15 AM, ET)	Purna Jyoti Shakya	Magnetospheric Pc5 pulsation generated by interplanetary shocks during the geomagnetic storm of 22 June 2015
5:00 PM - 5:15 PM, NT (7:15 AM - 7:30 AM, ET)	Sanjay Lal Karna	Photocurrent Behavior in Sunceco PV Cell Modules with Irradiance and Temperature Variation in Nepal
5:15 PM , NT (7:30 AM, ET)	TU-CDP Sessions Conclude.	

Friday, 7/19/2024 (USA)
Friday, 7/19 - Saturday, 7/20 (Nepal)

Virtual Sessions

Session VII: Data Science, Quantum Computing, Artificial Intelligence

Session Chair: Dipak Rimal
Webex In Charge: Prakash Adhikari

Time: 9:00 AM - 10:00 AM, ET (7/19/2024)
(6:45 PM - 7:45 PM, NT) (7/19/2024)

WebEx Link: <https://anpaglobal.webex.com/anpaglobal/j.php?MTID=m846f2e1c97b9788250f58e06b172c3f1>

Time	Presenting Author	Title
9:00 AM - 9:30 AM, ET (6:45 PM - 7:15 PM, NT)	Madan Lamichhane, PhD (Invited)	Physicist's Journey to Machine Learning Fraud Prevention Scientist
9:30 AM - 9:45 AM, ET (7:15 PM - 7:30, NT)	Dipak Rimal and Puskar Chapagain	Can AI Solve Physics Problems? Evaluating Efficacy of AI Models in Solving Higher Secondary Physics Exam Problems: A Comparative Study
9:45 AM - 10:00 AM, ET (7:30 PM - 7:45 PM, NT)	Prajwol Lamichhane	Comparative Analysis of ChatGPT, Bard, and LLaMA on Medical Prompts using the MedQuAD Dataset
10:00 AM - 11:00 AM, ET (7:45 PM - 8:45 PM, NT)	Break	

Session VIII: Physics Education Research

Session Chair: Umesh Silwal
Webex In Charge: Sabin Thapa

Time: 11:00 AM - 12:45 PM, ET (7/19/2024)
(8:45 PM - 10:30 PM, NT) (7/19/2024)

WebEx Link: <https://anpaglobal.webex.com/anpaglobal/j.php?MTID=m846f2e1c97b9788250f58e06b172c3f1>

Time	Presenting Author	Title
11:00 AM - 11:30 AM, ET (8:45 PM - 9:15 PM, NT)	Rudra Kafle (Invited)	Integration of interactive multimedia to physics courses for making physics-learning fun and engaging
11:30 AM - 11:45 AM, ET (9:15 PM - 9:30 PM, NT)	Bir Bohara	Critical Elements in Developing a Top-Notch Online Physics course.

11:45 AM - 12:00 PM, ET (9:30 PM - 9:45 PM, NT)	Chandra M. Adhikari	Effective Note Taking and its Impact in Learning Introductory Physics Courses
12:00 PM - 12:15 PM, ET (9:45 PM - 10:00 PM, NT)	Ganga Sharma	Do Gender Disparities Exist in Physics Lab Class Participation and Performance
12:15 PM - 12:30 PM, ET (10:00 PM - 10:15 PM, NT)	Rajan Ghimire	Exploring the Perceptions of Female Students towards Physics
12:30 PM - 12:45 PM, ET (10:15 PM - 10:30 PM, NT)	Richard Dudley	An Effort in Transforming Introductory Physics Lab Courses
12:45 PM - 2:00 PM, ET (10:30 PM - 11:45 PM, NT)	Break	

Session IX: Condensed Matter Physics and Material Science

Session Chair: Parashu Ram Kharel
Webex In Charge: Prakash Adhikari
Time: 2:00 PM - 4:00 PM, ET (7/19/2024)
(11:45 PM 7/19 - 1:45 AM 7/20, NT)

WebEx Link: <https://anpaglobal.webex.com/anpaglobal/j.php?MTID=m846f2e1c97b9788250f58e06b172c3f1>

Time	Presenting Author	Title
2:00 PM - 2:15 PM, ET (11:45 PM - 12:00 AM (7/20), NT)	Krishna K C	Cost-effective and Sustainable Growth of Various Polymorphs of Tungsten Oxide Nanostructures for Energy Conversion and Storage
2:15 PM - 2:30 PM, ET (12:00 AM - 12:15 AM (7/20), NT)	Sadhana Vattikuti	Crystallography and DFT Investigation on Ta ₂ C MXene
2:30 PM - 2:45 PM, ET (12:15 AM - 12:30 AM, NT)	Milo Xavier Sprague	Absence of Electronic Structure Reconfiguration in EuSnP Across the Antiferromagnetic Transition
2:45 PM - 3:00 PM, ET (12:30 AM - 12:45 AM, NT)	Nathan Valadez	Momentum Dependent Charge Density Wave Gap in an Antiferromagnetic Metal
3:00 PM - 3:15 PM, ET (12:45 AM - 1:00 AM, NT)	Iftakhar Bin Elius	Electronic Structure of a Nodal Line Semimetal Candidate
3:15 PM - 3:30 PM, ET (1:00 AM - 1:15 AM, NT)	Tej Nath Lamichhane	Technological application of novel magnetic materials
3:30 PM - 3:45 PM, ET (1:15 AM - 1:30 AM, NT)	Mohamed El Gazzah	Doping-induced spin reorientation in TmMn ₆ Sn ₆
3:45 PM - 4:00 PM, ET (1:30 AM - 1:45 AM, NT)	Resham B Regmi	Collinear Altermagnetism in layered intercalated transition metal dichalcogenide compound CoNb ₄ Se ₈
4:00 PM - 4:30 PM, ET (1:45 AM - 2:15 AM, NT)		Break

Session X: Condensed Matter Physics and Material Science

Session Chair: Mim Lal Nakarmi
Webex In Charge: Dinesh Wagle

Time: 4:30 PM - 6:00 PM, ET (7/19/2024)
(2:15 AM - 3:45 AM, NT) (7/20/2024)

WebEx Link: <https://anpaglobal.webex.com/anpaglobal/j.php?MTID=m846f2e1c97b9788250f58e06b172c3f1>

4:30 PM - 4:45 PM, ET (2:15 AM - 2:30 AM, NT)	Jittin V Thoms	Surface Plasmons-Enhanced Photoresponsivity in Au Nanoparticles/2D Bi ₂ O ₂ Se Hybrid Material
4:45 PM - 5:00 PM, ET (2:30 AM - 2:45 AM, NT)	Gabriel Kinney	Crystallography and DFT investigation on Sc ₂ C MXene
5:00 PM - 5:15 PM, ET (2:45 AM - 3:00 AM, NT)	Yamuna Paudel	Semiconductor Metasurfaces for the Enhancement of Photocatalytic and Photovoltaic Activity
5:15 PM - 5:30 PM, ET (3:00 AM - 3:15 AM, NT)	Saniya L. Lyles	Crystallography and DFT investigation on Ti ₂ C MXene
5:30 PM - 5:45 PM, ET (3:15 AM - 3:30 AM, NT)	Christopher Kai Addaman	Electromagnetic Structure and Crystallography of Ti ₂ N MXene from DFT Calculations
5:45 PM - 6:00 PM, ET (3:30 AM - 3:45 AM, NT)	Talon David Alexander	Crystallography, Electronic Structure, and Magnetism of Ti ₃ N ₂ MXene from DFT Calculations
6:00 PM - 9:30 PM, ET (3:45 AM - 7:15 AM, NT)		Break

Session XI: Condensed Matter Physics and Material Science

Session Chair: Mahendra DC
Webex In Charge: Puja Thapa

Time: 9:30 PM - 10:45 PM, ET (7/19/2024)
(7:15 AM - 8:30 AM, NT) (7/20/2024)

WebEx Link: <https://anpaglobal.webex.com/anpaglobal/j.php?MTID=m846f2e1c97b9788250f58e06b172c3f1>

9:30 PM - 9:45 PM, ET (7:15 AM - 7:30 AM, NT)	Laxmi Khatiwada	Advanced Solid-State Batteries With Innovative Solid Electrolyte Fabrication Techniques Shading Lights On Energy Density And Cyclic Durability Testing
9:45 PM - 10:00 PM, ET (7:30 AM - 7:45 AM, NT)	Poojan Koirala	Tuning the electronic band gap of Bi ₂ Y(1-x)Zr(x)O ₄ Cl: A density functional calculations
10:00 PM - 10:15 PM, ET (7:45 AM - 8:00 AM, NT)	Sudhan Koirala	Photocatalytic Dye Degradation & Antimicrobial Activity of Bi ₂ WO ₆ /ZnO Nanocomposite
10:15 PM - 10:30 PM, ET (8:00 AM - 8:15 AM, NT)	Karan Giri	Enhanced thermoelectric transport characteristics of novel BiSbTe-WSe ₂ composite films

10:30 PM - 10:45 PM, ET (8:15 AM - 8:30 AM, NT)	Laxman Chaudhary	Effects of Electron Doping in Electronic structure and Fermi Surface Morphology of HfTe ₂
10:45 PM - 11:00 PM, ET (8:30 AM - 8:45 AM, NT)	Break	

Session XII: Condensed Matter Physics and Material Science

Session Chair: Ganesh Pokhrel
Webex In Charge: Gyanendra Dhakal

Time: 11:00 PM (7/19)- 12:00 AM (7/20), ET
(8:45 AM - 9:45 AM, NT) (7/20/2024)

WebEx Link: <https://anpaglobal.webex.com/anpaglobal/j.php?MTID=m846f2e1c97b9788250f58e06b172c3f1>

11:00 PM - 11:15 PM, ET (8:45 AM - 9:00 AM, NT)	Bhupendra Sharma	Structural Stability and Electronic Structure of Monolayer Mo _{0.5} W _{0.5} Te ₂
11:15 PM - 11:30 PM, ET (9:00 AM - 9:15 AM, NT)	Prakash Khatri	Mechanical and Thermoelectric Behavior of 18-Valence Electron Half Heusler Tellurides XFeTe (X=Ti, Hf): A Theoretical Insight
11:30 PM - 11:45 PM, ET (9:15 AM - 9:30 AM, NT)	Pankaj Singh Dhama	Synthesis and Characterization of Fe@Cu Bimetallic Nanoparticles: Microemulsion Technique
11:45 PM - 12:00 AM (7/20), ET (9:30 AM - 9:45 AM, NT)	Krishna Bahadur Rai	First-Principles DFT Study of the Equilibrium Configuration, Electronic Structures, Vibrational Analysis and Thermodynamic Properties of Anisole and Chlorine Substituted Anisole
12:00 AM (7/20), ET (9:45 AM, NT)	Virtual Sessions for 7/19 concludes.	

Saturday, 7/20/2024 (USA)
Saturday, 7/20 - Sunday, 7/21 (Nepal)

Fayetteville State University, NC Sessions

Session XIII: Plenary Session (USA)

Session Chair: Bhoj Raj Gautam
Webex In Charge: Bhanu Ghimire

Time: 8:45 AM - 11:00 AM ET (7/20/2024)
(6:30 PM - 8:45 PM, NT) (7/20/2024)

WebEx Link: <https://anpaglobal.webex.com/anpaglobal/j.php?MTID=m846f2e1c97b9788250f58e06b172c3f1>

Time	Presenting Author	Title
8:45 AM - 9:00 AM, ET (6:30 PM - 6:45 PM, NT)	Daniel Autrey	Welcome Message by Department Chair

9:00 AM - 10:00 AM, ET (6:45 PM - 7:45 PM, NT)	Kenan Gundogdu (Plenary)	Room Temperature Perovskite Superfluorescence and its Implications for Quantum Materials
10:00 AM - 10:15 AM, ET (7:45 PM - 8:00 PM, NT)	Ghadendra Bhandari	Study of spontaneous magnetization reversal in manganites thin films
10:15 AM - 10:30 AM, ET (8:00 PM - 8:15 PM, NT)	Basu Dev Oli	Determining alloy composition in superconducting single-layer FeSe _{1-x} Te _x on SrTiO ₃ (001) Substrates by Machine Learning of STM/S Data
10:30 AM - 10:45 AM, ET (8:15 PM - 8:30 PM, NT)	Jett Wu	Nano-Optimized Acetylcholinesterase Biosensor to monitor In Vitro and In Vivo Cholinergic Activity
10:45 AM - 11:00 AM, ET (8:30 PM - 8:45 PM, NT)	Break	

Session XIV: General Session

Session Chair: Nabin Malakar
Webex In Charge: Pravin Sharma

Time: 11:00 AM - 2:00 PM, ET (7/20/2024)
(8:45 PM - 11:45 PM, NT) (7/20/2024)

WebEx Link: <https://anpaglobal.webex.com/anpaglobal/j.php?MTID=m846f2e1c97b9788250f58e06b172c3f1>

11:00 AM - 11:15 AM, ET (8:45 PM - 9:00 PM, NT)	Bhanu Ghimire	Meanderline Quarter Wave Plate
11:15 AM - 11:30 AM, ET (9:00 PM - 9:15 PM, NT)	Chandra M. Adhikari	Effect of cavity length in Mxene-based Fabry Perot interferometer
11:30 AM - 11:45 AM, ET (9:15 PM - 9:30 PM, NT)	Dipendra Dahal	Resonance peak position tuning in Fabry Perot Interferometer.
11:45 AM - 12:00 PM, ET (9:30 PM - 9:45 PM, NT)	Devi Lal Adhikari	Parity-Violating Electron Scattering as a Probe to Understand Fundamental Physics
12:00 PM - 12:15 PM, ET (9:45 PM - 10:00 PM, NT)	Trailokya Bhattarai	Advancing Disinfection Technology: Solar-Powered UV LED Systems for Microbial Reduction
12:15 PM - 12:30 PM, ET (10:00 PM - 10:15 PM, NT)	Sanjib K C	Space Radiation in Earth Environment with Radiation Data Portal
12:30 PM - 2:00 PM, ET (10:15 PM - 11:45 PM, NT)	Lunch Break	

Session XV: General Session

Session Chair: Chandra M. Adhikari
Webex In Charge: Dipendra Dahal

Time: 2:00 PM - 3:45 PM, ET (7/20/2024)
(11:45 PM, 7/20 - 1:30 AM, 7/21, NT)

WebEx Link: <https://anpaglobal.webex.com/anpaglobal/j.php?MTID=m846f2e1c97b9788250f58e06b172c3f1>

2:00 PM - 2:15 PM, ET (11:45 PM - 12:00 AM, (7/21) NT)	Chandra P. Joshi	An Approach to Near Hundred Percent Success in the Class
2:15 PM - 2:30 PM, ET (12:00 AM - 12:15 AM, NT)	Umesh Silwal	Evidence-based Teaching Practices in Physics: An Overview on Authentic Teaching and Learning
2:30 PM - 2:45 PM, ET (12:15 AM - 12:30 AM, NT)	Nabin Malakar	Information to Action Using Air Pollution data from Satellites and ground stations
2:45 PM - 3:00 PM, ET (12:30 AM - 12:45 AM, NT)	Bhoj Gautam	Gamma Radiation Induced Structural Changes in Two Dimensional MXenes
3:00 PM - 3:15 PM, ET (12:45 AM - 1:00 AM, NT)	Dr. Nisha H. Makani	Enhancing optical characteristics of Ti3C2 MXene quantum dots through hydrothermal and electrochemical synthesis methods
3:15 PM - 3:30 PM, ET (1:00 AM - 1:15 AM, NT)	Pravin Sharma	Atomistic Investigation of Ultrafast demagnetization of Permalloy films with varying laser fluence
3:30 PM - 3:45 PM, ET (1:15 AM - 1:30 AM, NT)	Tikaram Neupane	Optical Properties of Cadmium Selenide Quantum Dots
3:45 PM - 4:15 PM, ET (1:30 AM - 2:00 AM, NT)	Break	In-person sessions at Fayetteville State University conclude.
4:15 PM - 5:15 PM, ET (2:00 AM - 3:00 AM, NT)	ANPA Business Meeting (General Meeting)	Members Only Event WebEx Link : Sent to Members. WebEx In Charge: Dinesh Wagle
5:15 PM - 7:30 PM, ET 3:00 AM -5:15 AM, NT	Break	

Saturday, 7/20/2024 (USA)
Sunday, 7/21/2024 (Nepal)

Virtual Parallel Sessions

Session XVI: Condensed Matter Physics and Materials Science **(Parallel Track A)**

Session Chair: Ramakanta Chapai
Webex In Charge: Ashish Khanal

Time: 7:30 PM - 9:00 PM, ET (7/20/2024)
(5:15 AM, **7/21** - 6:45 AM, **7/21**, NT)

WebEx Link: <https://anpaglobal.webex.com/anpaglobal/j.php?MTID=m8b4d34b7b0c42403a6ae63866651f163>

Time	Presenting Author	Title
7:30 PM - 8:00 PM, ET (5:15 AM - 5:45 AM, NT)	Binod K Rai (Invited)	Binary Actinide Oxides: Synthesis, Crystal Structures, and Magnetic Properties
8:00 PM - 8:15 PM, ET (5:45 AM - 6:00 AM, NT)	Raj Kumar Paudel	Semiempirical Pseudopotential Method for Low-dimensional Materials

8:15 PM - 8:30 PM, ET (6:00 AM - 6:15 AM, NT)	Anup Pradhan Sakhya	MANIFESTATION OF CORRELATED ELECTRONIC STRUCTURE IN A KAGOME METAL YbTi ₃ Bi ₄
8:30 PM - 8:45 PM, ET (6:15 AM - 6:30 AM, NT)	Arun Kumar Kumay	Electronic structure in a transition metal dipnictide TaAs ₂
8:45 PM - 9:00 PM, ET (6:30 AM - 6:45 AM, NT)	Mazharul Islam Mondal	Observation of multiple flat bands and Van-Hove Singularities in a distorted kagome system NdTi ₃ Bi ₄
9:00 PM - 9:15 PM, ET (6:45 AM - 7:00 AM, NT)	Break	

Session XVII: Condensed Matter Physics and Material Science (Parallel Track A)

Session Chair: Ram Rai
Webex In Charge: Romakanta Bhattarai

Time: 9:15 PM - 10:30 PM, ET (7/20/2024)
(7:00 AM - 8:15 AM, NT) (7/21/2024)

WebEx Link: <https://anpaglobal.webex.com/anpaglobal/j.php?MTID=m8b4d34b7b0c42403a6ae63866651f163>

9:15 PM - 9:30 PM, ET (7:00 AM - 7:15 AM, NT)	Sekh Jamaluddin	Real-space observation of non-trivial spin textures in Ga-doped TmMn ₆ Sn ₆ kagome magnet
9:30 PM - 9:45 PM, ET (7:15 AM - 7:30 AM, NT)	Abhijeet Nayak	Crystal Growth and Magnetic properties of RFe ₆ Ge ₆ (R= Tb, Dy)
9:45 PM - 10:00 PM, ET (7:30 AM - 7:45 AM, NT)	Hari Bhandari	Role of Ga doping in the kagome ferromagnet YMn ₆ Sn ₆ -xGax
10:00 PM - 10:15 PM, ET (7:45 AM - 8:00 AM, NT)	Suresh Gnawali	High-order harmonic generation in graphene quantum dots in the field of an elliptically polarized optical pulse
10:15 PM - 10:30 PM, ET (8:00 AM - 8:15 AM, NT)	Tika R Kafle	Non-equilibrium States and Interactions in the Topological Insulator and Topological Crystalline Insulator Phases of NaCd ₄ As ₃
10:30 PM - 10:45 PM, ET (8:15 AM - 8:30 AM, NT)	Break	

Session XVIII: Applied and Industrial Physics (Parallel Track A)

Session Chair: Giri R. Joshi
Webex In Charge: Gajadhar Joshi

Time: 10:45 PM (7/20) - 12:00 AM (7/21), ET
(8:30 AM - 9:45 AM, NT) (7/21/2024)

WebEx Link: <https://anpaglobal.webex.com/anpaglobal/j.php?MTID=m8b4d34b7b0c42403a6ae63866651f163>

10:45 PM - 11:15 PM, ET (8:30 AM - 9:00 AM, NT)	Pushpa Raj Pudasaini (Invited)	Advanced Semiconductor Technologies: Current Status and Future Outlook.
11:15 PM - 11:30 PM, ET (9:00 AM - 9:15 AM, NT)	Sunil Koju	Preparation of Activated Carbon based on Buddleja Paniculata as a Low-Cost Electrode Material for Supercapacitor Application

11:30 PM - 11:45 PM, ET (9:15 AM - 9:30 AM, NT)	Tej Nath Lamichhane	A material processing prospective on exchange-spring permanent magnets
11:45 PM - 12:00 AM (7/21), ET (9:30 AM - 9:45 AM, NT)	Basanta Kumar Rajbanshi	Estimation of Global Solar Radiation at Eastern Upland, Taplejung, Nepal using RadEst 3.0 software
12:00 AM, ET (9:45 PM, NT)	Virtual Parallel Sessions Track A for 7/20 (ET) Conclude.	
Session XIX: High Energy Physics (Parallel Track B) Session Chair: Medani Sangroula Webex In Charge: Sabin Thapa Time: 7:30 PM - 8:45 PM, ET (7/20/2024) (5:15 AM - 6:30 AM, NT) (7/21/2024) WebEx Link: https://anpa.my.webex.com/anpa.my/j.php?MTID=m577faa6b512e5db63c1b69f62e790a35		
7:30 PM - 8:00 PM, ET (5:15 AM - 5:45 AM, NT)	Chuyu Liu (Invited)	History and Future of accelerator development at Brookhaven National Lab
8:00 PM - 8:15 PM, ET (5:45 AM - 6:00 AM, NT)	Shruti Shrestha	High-Voltage Monolithic Active Pixel Sensors based tracker for the Mu3e Experiment
8:15 PM - 8:30 PM, ET (6:00 AM - 6:15 AM, NT)	Bhawin Dhital	Strong hadron cooling for the collider experiments
8:30 PM - 8:45 PM, ET (6:00 AM - 6:15 AM, NT)	Sushil Kumar Sedhai	Radiation Shielding Properties Of Ti-Cu-Based Bulk Metallic Glasses
8:45 PM - 9:15 PM, ET (6:30 AM - 7:00 AM, NT)	Break	
Session XX: Biophysics (Parallel Track B) Session Chair: Laxman Mainali Webex In Charge: Bhojraj Bhandari Time: 9:15 PM - 10:30 PM, ET (7/20/2024) (7:00 AM - 8:15 AM, NT) (7/21/2024) WebEx Link: https://anpa.my.webex.com/anpa.my/j.php?MTID=m577faa6b512e5db63c1b69f62e790a35		
9:15 PM - 9:45 PM, ET (7:00 AM - 7:30 AM, NT)	Ganesh Chand (Invited)	AI and computational neuroimaging for brain health and disorders
9:45 PM - 10:00 PM, ET (7:30 AM - 7:45 AM, NT)	Supriya Dhakal	ATR-FTIR Spectroscopy for Carbohydrate Concentration Calibrations

10:00 PM - 10:15 PM, ET (7:45 AM - 8:00 AM, NT)	Chandrama Mukherjee	Differences in Brain Volume Changes between Mild Cognitive Impairment and Alzheimer's Disease: A Gender-Specific Investigation Incorporating Behavioral Measures
10:15 PM - 10:30 PM, ET (8:00 AM - 8:15 AM, NT)	Navdeep Kalkat	Temperature and Cholesterol Content Modulates the Interaction of Alpha-Crystallin with Model of Lens-Lipid Membrane
10:30 PM - 10:45 PM, ET (8:15 AM - 8:30 AM, NT)	Break	

Session XXI: Biological, Medical, Soft Matter and Chemical Physics (Parallel Track B)

Session Chair: Kamal Dhakal
Webex In Charge: Bhojraj Bhandari

Time: 10:45 PM (7/20) - 12:00 AM (7/21), ET
(8:30 AM - 9:45 AM, NT) (7/21/2024)

WebEx Link: <https://anpa.my.webex.com/anpa.my/j.php?MTID=m577faa6b512e5db63c1b69f62e790a35>

Time	Presenting Author	Title
10:45 PM - 11:00 PM, ET (8:30 AM - 8:45 AM, NT)	Anup Shrestha	Muon dose estimation in brain tumor
11:00 PM - 11:15 PM, ET (8:45 PM - 9:00 PM, ET)	Roshan Pudasaini	Muonium behavior in derivatives of hemoglobin: a first-principles study
11:15 PM - 11:30 PM, ET (9:00 AM - 9:15 AM, NT)	Kalpna Gyawali	In silico determination of selected plant-based compounds against SARS-CoV-2
11:30 PM - 11:45 PM, ET (9:15 AM - 9:30 AM, NT)	RAJESH MAHARJAN	In Silico Determination of Flavonoids as Antitubercular Agents
11:45 PM - 12:00 AM (7/21), ET (9:30 AM - 9:45 AM, NT)	Anjan Dahal	Anisotropic muonium observed in PBS buffer
12:00 AM, ET (9:45 PM, NT)	<i>Virtual Parallel Sessions Track B for 7/20 (ET) Conclude.</i>	

**Sunday, 7/21 (USA)
Sunday, 7/21 (Nepal)**

Virtual Sessions

Session XXII: Astronomy /Space /Cosmo Science/ Atmospheric Physics (Parallel Track A)

Session Chair: Laxman Adhikari

Webex In Charge: Sujan Gautam

Time: 8:45 AM - 10:30 AM , ET (7/21/2024)

(6:30 PM - 8:15 PM, NT) (7/21/2024)

WebEx Link: <https://anpaglobal.webex.com/anpaglobal/j.php?MTID=m8b4d34b7b0c42403a6ae63866651f163>

Time	Presenting Author	Title
8:45 AM - 9:00 AM, ET (6:30 PM - 6:45 PM, NT)	Pradip Poudel	Correlation Analysis of Solar Wind Parameters during the Geomagnetic Storm Events.
9:00 AM - 9:15 AM, ET (6:45 PM - 7:00 PM, NT)	Aayush Gautam	Gradual cluster formation: protoplanetary disk evolution
9:15 AM - 9:30 AM, ET (7:00 PM - 7:15 PM, NT)	Bhairab Ale	Analysis of Cross-Correlation of Bz and Pc4 during the Geomagnetic Storm of March 17, 2015, and May 8, 2016
9:30 AM - 9:45 AM, ET (7:15 PM - 7:30 PM, NT)	Bishwas L. Shrestha	Suprathermal Hydrogen Pickup Ion Tails in the Outer Heliosphere
9:45 AM - 10:00 AM, ET (7:35 PM - 7:45 PM, NT)	Nabin Gurung	Dust Color Temperature And Mass Around Perseus Molecular Cloud Ngc 1333 Using Infrared Data
10:00 AM - 10:15 AM, ET (7:45 PM - 8:00 PM, NT)	Prem kumari Katwal	Space travel SST 6 Mission
10:15 AM - 10:30 AM, ET (8:00 PM - 8:15 PM, NT)	Sujan Prasad Gautam	Solar wind turbulence anisotropy evolution in the inner heliosphere: A radial alignment study
10:30 AM - 10:45 AM, ET (8:15 PM - 8:30 PM, NT)	Break	

Session XXIII: Biological, Medical, Soft Matter and Chemical Physics (Parallel Track B)

Session Chair: Purushottam Babu Tiwari

Webex In Charge: Indra Dev Sahu

Time: 8:45 AM - 10:30 AM, ET (7/21/2024)

(6:30 PM - 8:15 PM, NT) (7/21/2024)

WebEx Link: <https://anpa.my.webex.com/anpa.my/j.php?MTID=m577faa6b512e5db63c1b69f62e790a35>

Time	Presenting Author	Title
8:45 AM - 9:00 AM, ET (6:30 PM - 6:45 PM, NT)	Mehmood Pirzada	ATR-FTIR spectroscopic analysis of biomarkers in mice blood serum for disease monitoring
9:00 AM - 9:15 AM, ET (6:45 PM - 7:00 PM, NT)	Preston Hazen	Alpha-Crystallin Becomes Increasingly Membrane Bound to Human Cortical and Nuclear Lens Lipid Membranes with the Progression of Cortical and Nuclear Cataracts
9:15 AM - 9:30 AM, ET (7:00 PM - 7:15 PM, NT)	Krishna Sigdel	Atomic force Microscopy of Peptide-Membrane Interactions
9:30 AM - 9:45 AM, ET (7:15 PM - 7:30 PM, NT)	Beyza Bektasoglu	Studying Long QT Syndrome Mutations of KCNE3 using Site-Directed Spin Labeling EPR Spectroscopy
9:45 AM - 10:00 AM, ET (7:35 PM - 7:45 PM, NT)	Ganga Sharma	Electric Force Model for pH-Dependent Membrane Proteins/Peptides Folding and Insertion Processes
10:00 AM - 10:15 AM, ET (7:45 PM - 8:00 PM, NT)	Amba Datt Pant	Application of muon for life sciences
10:15 AM - 10:30 AM, ET (8:00 PM - 8:15 PM, NT)	Nawal K. Khadka	Atomic Force Microscopy Approach to Study the Elasticity of Eye Lens Lipid Membranes and the Whole Lens
10:30 AM - 10:45 AM, ET (8:15 PM - 8:30 PM, NT)	Break	

Session XXIV: Atomic, Molecular, Optical and Plasma Physics

Session Chair: Dolendra Karki
Webex In Charge: Samana Shrestha

Time: 10:45 AM - 11:45 AM, ET (7/21/2024)
(8:30 PM - 9:30 PM, NT) (7/21/2024)

WebEx Link: <https://anpaglobal.webex.com/anpaglobal/j.php?MTID=m8b4d34b7b0c42403a6ae63866651f163>

Time	Presenting Author	Title
10:45 AM - 11:15 AM, ET (8:30 PM - 9:00 PM, NT)	Ganapathi Subramania (Invited)	Light manipulation with nanostructures
11:15 AM - 11:30 AM, ET (9:00 PM - 9:15 PM, NT)	Abdul Klam Khan	Effect of Plasma-activated Water in the yield of oyster mushroom
11:30 AM - 11:45 AM, ET (9:15 PM - 9:30 PM, NT)	N. Rama Devi	Synthesis, structure, Stokes and anti-Stokes visible luminescence of Tm ³⁺ -Yb ³⁺ co-doped Lu ₃ Sc ₂ Ga ₃ O ₁₂ nanorods
Conference Concludes.		