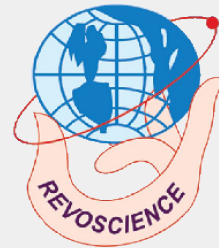


Holographic Himalaya- PWF Nepal



The Abdus Salam
**International Centre
for Theoretical Physics**
Physics Without Frontiers



Organizing members:



Kiran Adhikari, Nepal



Laxman Dangol, Nepal



Rajeev Singh, India

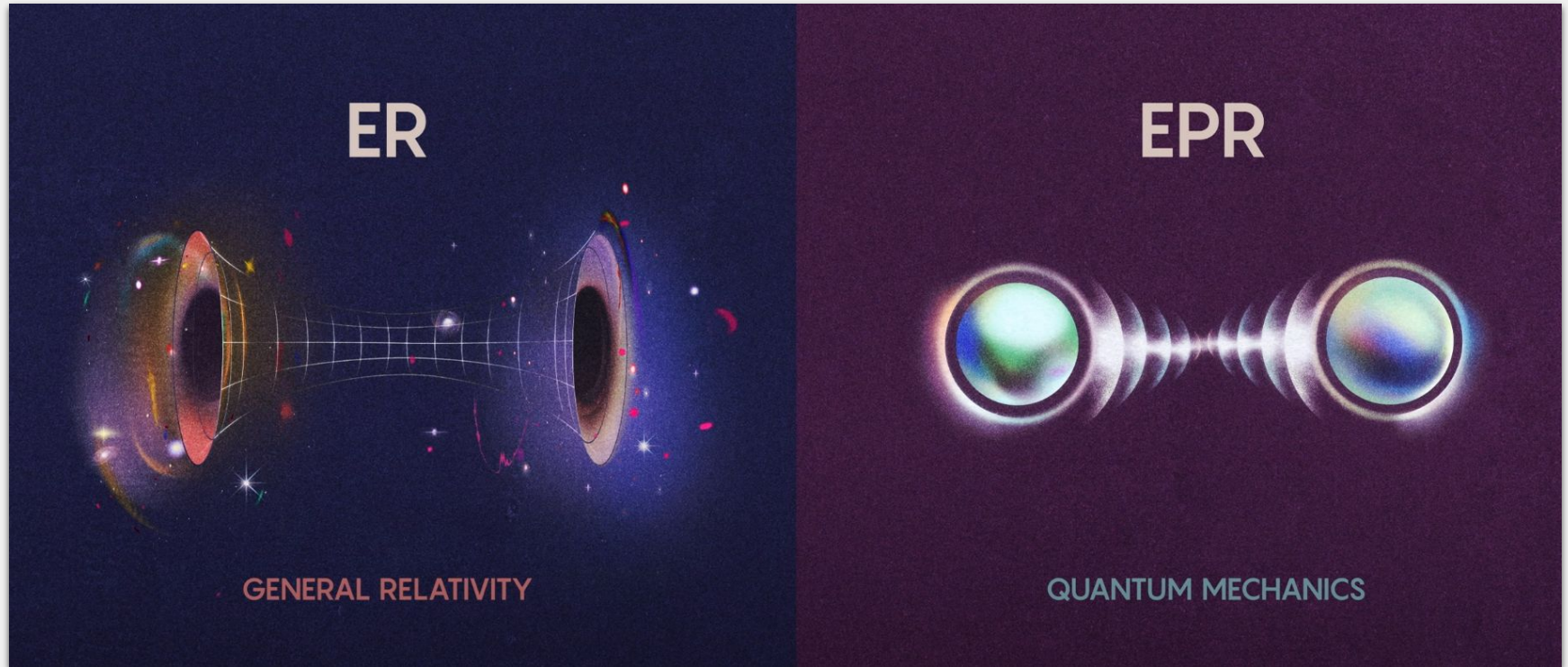
Special thanks to: Kate Shaw, Natasa Stojic, Margherita Di Giovannantonio, Prof. Dr. Nakarmi

Motivation

- High-level research at low cost
- Field of Quantum Information & Quantum Gravity is not much developed in Nepal.
- Interested students but no platform



Theme of the journal club: Quantum Information of Space, Time and Matter



Applicants: 190

Selected: 35

**Final certificates
awarded:
Male 16, Female 5**

The screenshot displays a Zoom meeting interface with a grid of 25 participants. Each tile shows a video thumbnail, a name, and a muted status icon. The participants are arranged in a 5x5 grid. The names visible are: Laxman Dangol, Kiran Adhikari, Saroj Ray, Mausam Ghimire, Aasis Bhandari, Santosh Ballav Sapkota, Pramod Kharel, Shreedip, Swaraj Sagar Pradhan, Anup Lamsal, bishartha, Chandra Poudel, Ashutosh Giri, Sushil Khatri, Adwait Rijal, HariR Gauli, Sushil Khatri, Mijas, Gambhir pande, Aman Ganeju, Madan Devkota, Manghang, Ashok Kumar, Rohit Bhattarai, and Denisha Sapkota. The bottom toolbar includes icons for Unmute, Stop Video, Security, Participants (28), Chat, Share Screen, Record, Reactions, Apps, Whiteboards, and More. A red 'End' button is located in the bottom right corner. On the right side, there is a search bar and a list of participants with their initials and names.

Activity: Expert talks

Recording... You are viewing Rajendra Adhikari's screen View Options

Parallel computing Domain Decomposition

Task mean processor or set of processors

Credit: <https://nyu-cds.github.io/python-mpi/04-decomposition>

Unmute Start Video Security Participants 36 Polls Chat Share Screen Pause/Stop Recording Reactions

MONTHLY HOLOGRAPHIC
HIMALAYA TALK

Quantum gravity, quantum information and quantum chaos



Speaker:

Dr. Alexandre Belin



February 1, 2023
6:45 PM, Nepal time



Online via Zoom
Meeting Id:
611 5245 1663
Password: 061751

Activity: Group discussions



Output: Two research papers and one in progress

arXiv > quant-ph > arXiv:2309.10382

Quantum Physics

[Submitted on 19 Sep 2023 (v1), last revised 17 Nov 2023 (this version, v2)]

Krylov Complexity of Fermionic and Bosonic Gaussian States

Kiran Adhikari, Adwait Rijal, Ashok Kumar Aryal, Mausam Ghimire, Rajeev Singh, Christian Deppe

The concept of **complexity** has become pivotal in gauging the chaotic evolution of a quantum state.

Quantum optimization of coherent chaotic systems: A case for buses of Kathmandu.

Kiran Adhikari¹, Aman Ganeju², Iva Kumari Lamichhane³, Rohit Bhattarai³, Manghang Limbu³, Nishma Bhattarai⁴, and Christian Deppe¹

¹Institute for Communications Engineering, Technical University of Munich, Arcisstraße 21, 80333 München

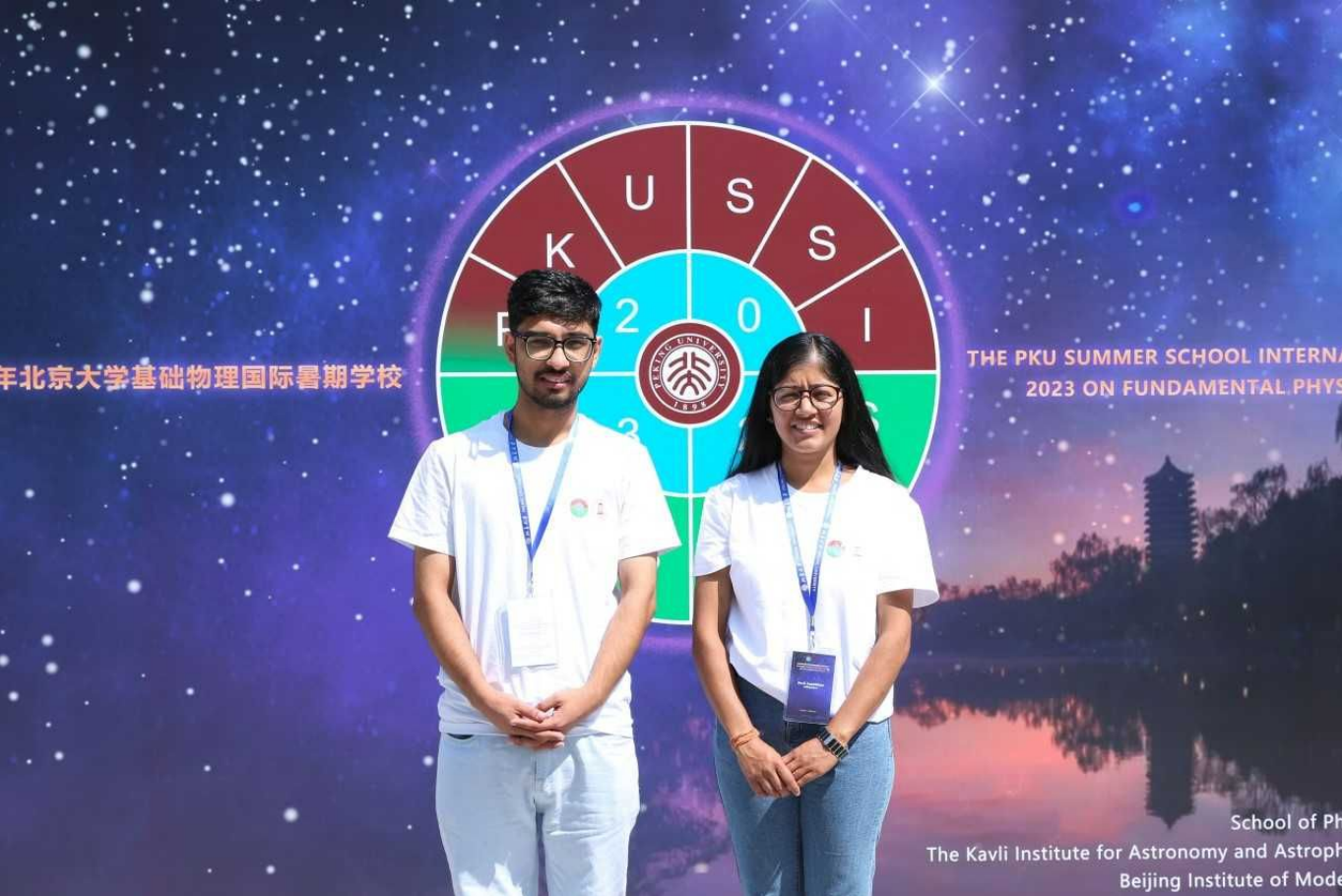
²Khwopa College, Tribhuvan University, Kathmandu, Nepal

³Tri-Chandra Multiple Campus, Tribhuvan University, Kathmandu, Nepal

⁴St. Xavier's College, Maitighar, Kathmandu, Nepal

Final Student Presentations





“Holographic Himalaya proved really fruitful for me. I hope I will be in the position in the future to motivate younger generations to work in the exploration of the mathematical nature of reality.”

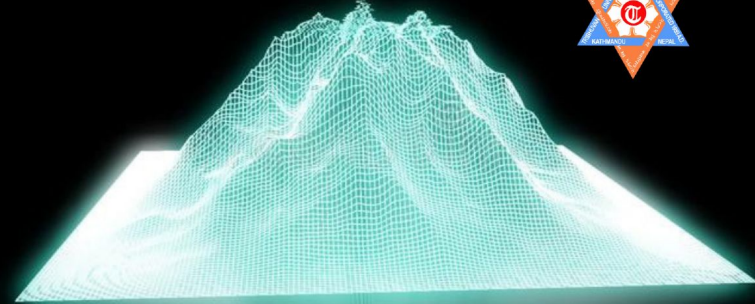
**Iva Kumari
Lamichane**

Students participating at Summer School International (PKUSSI) 2023 program on 'Fundamental Physics' in Beijing, China

Current status and further plans

1. Selection process running for new session
2. We want to accept more students as nearly half of participants had to quit in mid session.
3. More outreach programs- Physical program on December 8
4. Get larger volunteer network including alumni

PHYSICS WITHOUT FRONTIERS NEPAL



Holographic Himalaya

Are you a BSc/MSc Physics Student in Nepal and interested to join a research journal club on **Quantum Information aspects of Space-time and Matter**? The club will run from November 2023 for 6 months consisting of a weekly online session with international experts, hands-on tutorials, career and opportunity sessions, and you will work on and present a research project.

APPLY: <https://tinyurl.com/ApplyPWFNEPAL>

DEADLINE: 15 November 2023

Organised by:

Prof. Dr. Lekha Nath Mishra, Patan Multiple Campus, Tribhuvan University, Kathmandu

Prof. Jeevanjyoti Nakarmi, Tribhuvan University, Kathmandu

Mr Kiran Adhikari, Technical University of Munich, PhD Student

Mr Laxman Dangol, RevoScience Media, Nepal, Editor



A scenic view of a turquoise lake in a mountain valley. The lake is surrounded by snow-capped mountains and a clear blue sky with a few clouds. The foreground shows a rocky, snow-dusted slope.

Thank you!!