



INTERNATIONAL CONFERENCE ON CELEBRATING 100 YEARS OF QUANTUM MECHANICS

21st - 22nd November, 2024

Organized by

St. Anthony's College, Shillong & National Institute of Technology Meghalaya



About the Conference: Quantum Mechanics has fundamentally transformed the field of Physics with its distinctive concepts and principles. Serving as a potent tool, it offers an effective means to elucidate and comprehend numerous phenomena for over a century. On top of that, Quantum Mechanics furnishes a robust theoretical foundation for the development and construction of cutting-edge machinery operating at the subatomic and nano-scale. Beyond its remarkable impact on present-day technology, this continuously evolving field also holds significant potential for the near and distant future.

Objectives:

- To facilitate the connection between physicists, scholars, and aspiring researchers within the realm of Physics, specifically focusing on the burgeoning domain of quantum mechanics.
- To encourage researchers to showcase their works on both national and international platforms.
- To expose researchers to novel methodologies and techniques pertinent to their respective fields of expertise.
- To provide ample opportunity for undergraduate, postgraduate, and young researchers to interact with senior professors and scientists.

Thrust Areas:

Foundations of Quantum Mechanics

- (i) Historical Developments
- (ii) Recent Advances and applications

Quantum Communications

- (i) Quantum error correction
- (ii) Quantum Imaging
- (iii) Quantum Networks
- (iv) Quantum Repeaters
- (v) Quantum teleportation

High Energy Physics

- (i) Recent developments
- (ii) Dark Matter
- (iii) Dark Energy

Quantum Materials Wires and Dots

- (i) Transport and optical properties in low dimensions
- (ii) Devices
- (iii) Applications

Density Functional Theory (DFT)

- (i) Applications to Theoretical Material Science
- (ii) Experimental Condensed Matter Physics
- (iii) Simulation details

Quantum Sensing, Information and Metrology

Features of the conference:

- ☐ Keynote Speech & Invited Talks by Prominent Figures
- ☐ Oral & Poster Presentations by Researchers
- ☐ Cultural Programme
- ☐ Top Presenters Award

Speakers at the Conference:

Prof. Dr. Roderich Moessner, MPI-PKS, Germany
Prof. P. K. Panigrahi, IISER, Kolkata
Prof. R. P. Singh, PRL, Ahmedabad
Prof. S. N. Pandey, Motilal Nehru NIT, Allahabad
Prof. A. Das, IACS, Kolkata
Prof. S. Vaidya, IISC, Bangalore
Prof. S. Basu, IIT, Guwahati

Conference website:



<https://sites.google.com/view/iccqm2024/home>

Patrons:

Prof. P. Mahanta	Fr. A. Puwein SdB
Director	Principal
NIT Meghalaya	St. Anthony's College Shillong

National Advisory Committee:

Prof. P. R. Alapati: Director, GKCIET, Malda, West Bengal
Prof. S. N. Pandey: Motilal Nehru NIT Allahabad
Prof. A. Bhattacharjee: NIT Meghalaya
Prof. P. K. Patra: North Eastern Hill University, Meghalaya
Prof. S. Basu: IIT Guwahati
Prof. Z. Pachuau: Mizoram University
Prof. A. Das: IACS Kolkata
Dr. A. Tripathi: Sikkim University
Dr. B. Borah: Assam Don Bosco University, Guwahati

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Mr. F. lawphniaw, St. Anthony's College, Shillong
Ms. M. Brahma, St. Anthony's College, Shillong

Important Dates

Abstract submission last date: **30th September 2024**
Acceptance of the Abstract Submission: **10th October 2024**
Starting date of Registration: **11th October 2024**
Closing date of Registration: **25th October 2024**

Who can register?

Research Scholars
Faculty/Scientist from
(Indian & Foreign)

Registration fees

Scholars(Indian : ₹ 2500
Foreign: ₹ 10000)
Faculty/Scientist(Indian: ₹ 3500 Foreign: ₹ 15000)

**Food & Accommodation
will be provided during
the Conference**

**Travel Allowance may be
provided subjected to
availability of funds**

Selected papers will be
published in a reputed
peer-reviewed journal

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