



VISITOR'S PROGRAMME 2025

(19th – 20th February 2025)

**DEPARTMENT OF PHYSICS & ASTROPHYSICS
UNIVERSITY OF DELHI, DELHI-110007**

PROGRAM

*Venue: Seminar Hall (G12), Maharishi Kanad Bhawan,
University of Delhi*

February 19, 2025 (Wednesday)

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| 9.00 – 9.30 A.M. | Registration |
| 9.30 – 10.00 A.M. | <i>Opening Remarks: Prof. Debajyoti Choudhury</i>
Session Chair: Prof. Debajyoti Choudhury |
| 10:00 – 11.00 A.M. | <i>One photon in, two photons out</i>
<i>Prof. K. Thyagarajan, IIT Delhi (Rtd)</i> |
| 11.00 – 11.30 A.M. | High TEA
Session Chair: Prof. Amarjeet Kaur |
| 11.30 – 12.30 P.M. | <i>Precise Time keeping with Atomic Clocks for strategic applications and advanced scientific research</i>
<i>Prof. Subhasis Panja, NPL, Delhi</i> |
| 12.30 – 1.15 P.M. | <i>Science and technology near absolute zero temperatures</i>
<i>Dr. Om Prakash, University of Delhi</i> |
| 1.15 – 2.30 P.M. | LUNCH
Session Chair: Prof. Sanjay Jain |
| 2.30 – 3.30 P.M. | <i>Emergence of Quantum Technologies from Quantum Physics: Journey of a Century</i>
<i>Prof. Arvind, IISER Mohali</i> |
| 3.30 – 5.00 P.M. | Poster Coordinators: Dr. Utkarsh Mishra & Dr. Archana Mishra
<i>Poster Session with Tea</i> |

February 20, 2025 (Thursday)

Session Chair: Prof. S. Annapoorni

10.00 – 11.00 A.M. *Quantum Technologies in India's Defence Sector*
Prof. Santu Sardar, DRDO, Pune

11.00 – 11.30 A.M. **TEA Break**

Session Chair: Prof. T. R. Seshadri

11:30 – 12.30 P.M. *Quantum simulations for atomic nuclei and some with them*
Prof. P. Arumugam, IIT Roorkee

12.30 – 1.15 P.M. *Exploring novel magnet-superconductor hybrid platforms for quantum computing*
Dr. Archana Mishra, University of Delhi

1.15 – 2.30 P.M. **LUNCH**

Session Chair: Prof. Binay Kumar

2.30 – 3.30 P.M. *Quantum-Enhanced Sensing with Many-Body Systems*
Dr. Utkarsh Mishra, University of Delhi

3.30 – 4.30 P.M. *A perspective towards materials discovery from advanced state-of-the-art quantum mechanics-driven simulations*
Prof. Saswata Bhattacharya, IIT Delhi

4.30 – 5.00 P.M. *Concluding Remarks: Prof. S. Murugavel*