

International Centre for Theoretical Physics (ICTP) Prize

Prelims: Current events of national and international importance | Awards & Prizes

Why in news?

Recently, the ICTP Prize for the year 2025 was awarded.

- It is awarded annually to recognise outstanding and original <u>contributions in</u>
 <u>physics</u> by young scientists from, and working <u>in</u>, <u>developing countries</u>.
- Founded in ICTP was founded in 1964 by Pakistani physicist & Nobel laureate *Abdus Salam* and Italian physicist *Paolo Budinich*.
- Established in ICTP Prize was established in 1982 by the ICTP Scientific Council.
- Citation The ICTP Prize includes a sculpture, a certificate and a cash award.

Winner for 2025

Winner	Key Contributions
Titas Chanda, Assistant Professor, IIT-Madras	 Advanced quantum information science and quantum many-body physics Worked on quantum correlations and open quantum systems Applications: Quantum batteries, communication protocols, and resource theories Developed numerical tools across quantum optics, cold atoms, and strongly correlated systems
Sthitadhi Roy, Assistant Professor, Tata institute of fundamental research, Bengaluru	 Specialised in non-equilibrium dynamics of quantum many-body systems Researched measurement-induced phenomena, many-body localisation, and emergent phases of quantum matter Explored hybrid quantum circuits and protocols using measurements to prepare exotic topological and dynamical phases

- **Dedicated to** This year's prize is dedicated to <u>Italian physicist Giancarlo</u> <u>Ghirardi</u>, known for foundational work in quantum mechanics and entanglement-based methods.
- Past winners from India Ashoke Sen, Deepak Dhar, Spenta Wadia, Rajesh Gopakumar, Mohit Randeria, Shiraz Minwalla, and G. Baskaran.
- **Significance** The ICTP has played a pivotal role over decades in shaping and nurturing India's physics community on the global stage.

References

- 1. The Hindu | ICTP Prize, 2025
- 2. ICTP | ICTP Prize, 2025

