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 ***contributions in physics*** by young scientists from, and working ***in, developing countries.***
- **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 ***Italian physicist Giancarlo Ghirardi***, 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

