

Italy and India partners in physics: Discuss quantum, astronomy & new materials

By Dipanjan Roy Chaudhury, ET Bureau | Last Updated: Feb 25, 2026, 11:43:00 PM IST

Synopsis

The Indo-Italian Workshop in Physics, held from February 26–28 in New Delhi and organized by the Embassy of Italy in collaboration with IIT Delhi, brings together leading researchers from both countries to advance cooperation in fundamental and applied physics. The three-day event features seminars and high-level discussions on cutting-edge areas such as particle physics, quantum technologies, condensed matter, gravitational waves, artificial intelligence, and applied physics.



ET AI | Briefing

Listen to this article in summarized format

Listen



Cutting-edge research, technological innovation, and high-level academic dialogue. Three days of events, seminars, and conferences dedicated to fundamental and applied physics, aimed at giving further momentum to the strong scientific cooperation between Italy and India.

This is the focus of the [Indo-Italian Workshop in Physics](#), taking place from 26 to 28 February and organized by the Embassy of Italy in New Delhi in collaboration with IIT Delhi.

Italian and Indian researchers and scientists from leading institutions in both countries are engaging in discussions on the most advanced topics of contemporary research: particle physics, condensed matter, quantum physics and its applications, [gravitational waves and astronomy](#), applied physics, and the applications of artificial intelligence and machine learning to physical research.

From Italy, representatives of some of the country's most prestigious academic and research institutions are participating: the University of Naples Federico II; the University of Bologna; the University of Padua; CERN; SISSA (International School for Advanced Studies); the Gran Sasso Science Institute; Elettra Sincrotrone Trieste; and the University of Naples Federico II.

On the Indian side: the National Physical Laboratory in New Delhi, the Raman Research Institute in Bangalore, the Indian Institute of Technology Mumbai, the Indian Institute of Science in Bangalore, the Indian Institute of Science Education and Research in Pune, and the Tata Institute of Fundamental Research in Mumbai.

The workshop is opened on 25 February by Professor Atish Dabholkar, Indian Director of the International Centre for Theoretical Physics (ICTP) in Trieste.

The three-day workshop provides a highly significant platform to highlight the dynamism of scientific collaboration and the complementarity of the two ecosystems.

"Scientific cooperation is a fundamental pillar of the partnership between Italy and India," commented Ambassador of Italy to India, Antonio Bartoli. "Our two Governments placed it at the heart of the Joint Strategic Action Plan adopted by our Prime Ministers in 2024, and since then we have launched numerous initiatives. Among them, two Memoranda of Understanding — one signed in April by Italy's Minister for Universities and Research, Anna Maria Bernini, and her counterpart Jitendra Singh — for joint research projects, and the launch of a Dialogue on Science, Research and Innovation involving the leading universities and research centres of both countries. We also carried out a mission from Italy focused on space, fostering interactions among companies and institutional dialogue. We are working on the opening of INNOVIT India, a centre dedicated to innovation aimed at strengthening exchanges between our two ecosystems: start-ups, technology companies, universities, and research institutes. Its objectives include promoting joint research initiatives, knowledge exchange, and the mobility of top talent. Academic collaboration and university exchanges play a fundamental role."

Italy and India cooperate in many areas of shared interest: not only quantum technologies, but also biotechnology, life sciences, biofuels and renewable energy, Big Data, and artificial intelligence.

Only a few days ago, on the occasion of the AI Impact Summit, some of Italy's leading actors in quantum computing and scientific research came to Delhi, including representatives from CINECA in Bologna, ENI Quantum, ENEA, and the Euro-Mediterranean Centre on Climate Change, along with a large group of start-ups.

"This workshop is therefore part of an increasingly close and ambitious framework of cooperation, which will see similar initiatives in other scientific and research fields in the coming months," the Ambassador noted.

Alongside the scientific and academic events, physics also engages with the wider public. At the Italian Cultural Institute, the documentary Chandra – The Journey of a Star is screened, dedicated to Nobel Laureate in Astrophysics Subrahmanyan Chandrasekhar, whose studies revolutionized our understanding of the life cycle of stars.

The following day, in the evocative setting of Humayun's Tomb, a public lecture explores the use of muography - the use of cosmic particles to "X-ray" even large architectural structures of the past - as an innovative method for archaeological

investigations, with case studies applied to the Egyptian pyramids and the Greco-Roman underground — an extraordinary example of how physics can dialogue with history and cultural heritage.

A forward-looking collaboration defines the partnership between Italy and India in science and research. “A shared history of fruitful cooperation, destined to grow further,” commented Prof. Sergio Ledda, Scientific Attaché of the Embassy of Italy in India. “In physics, as in other disciplines, Italy can contribute at the highest level to India’s drive toward ever more advanced technological standards and achievements. We combine the legacy of a distinguished tradition of researchers with a strong commitment to innovation and the exploration of new scientific frontiers. This joint path between our two countries rests on a clear awareness: knowledge, when shared, becomes a driver of progress and innovation.”

Add ET as a Reliable and Trusted News Source



(You can now subscribe to our [Economic Times WhatsApp channel](#))