

# Global Honour for Indian Scientist

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**Atish Dabholkar**, a **theoretical physicist** from India, known for his research on **string theory** and **quantum black holes**, has been appointed as the next director of the Italy-based **International Centre for Theoretical Physics (ICTP)**.

- Dabhokar will succeed **Fernando Quevedo** from November 2019.
- He is the second Indian appointed to the post in ICTP history after Katepalli Sreenivasan, who was Quevedo's predecessor.
- Dabholkar is currently the head of the High Energy, Cosmology and Astroparticle Physics section of ICTP based in **Trieste**, **north-east Italy**.
- He is also the winner of the 2006 **Shanti Swarup Bhatnagar Award** for Science and Technology.
- He completed his school education in Kolhapur district of Maharashtra and did his graduation from IIT, Kanpur, and earned a PhD in theoretical physics from Princeton University.
- Until 2010, he was a professor of theoretical physics at Tata Institute of
  Fundamental Research in Mumbai, and has been a visiting professor at Stanford
  University and a visiting scientist at CERN.

#### **International Centre for Theoretical Physics**

- International Centre for Theoretical Physics (ICTP) was founded in 1964 by the late Nobel Laureate **Abdus Salam.**
- Its mandate is to provide education and skills to scientists from developing countries for their productive careers.
- It has helped in **stemming the scientific brain drain** from the developing world.

#### **String Theory**

- It is an attempt to combine the **quantum mechanics** (body of scientific laws that describe the behavior of photons, electrons and other particles that make up the universe) and **Albert Einstein's theory of relativity** with an overarching framework that can explain all of physical reality.
- It tries to do so by positing that particles are actually **one-dimensional**, string-like entities whose vibrations determine the particles' properties, such as their mass and charge.

### European Organization for Nuclear Research

- European Organization for Nuclear Research (CERN) is the **European Organization founded in 1954 for Nuclear Research.**
- It aims to provide a unique range of particle accelerator facilities that enable worldclass research in **fundamental physics**.
- It operates the world's largest and most powerful particle accelerator i.e **Large Hadron Collider (LHC).**

## Theoretical Physics

- It is the development of mathematical formalisms and computational protocols for describing all aspects of objects found in the world around us and their interaction.
- This can involve both providing models for understanding empirical results or constructing self-logical theories for explaining phenomena beyond current experiments.

#### Shanti Swarup Bhatnagar Award

- The award is named after the founder Director of the <u>Council of Scientific &</u>
   <u>Industrial Research (CSIR) India</u>, the late Dr (Sir) Shanti Swarup Bhatnagar and is known as the 'Shanti Swarup Bhatnagar (SSB) Prize for Science and Technology'.
- The Prize is given each year for outstanding contributions to science and technology.

#### **Source: TH**