The ITU CoE at the Abdus Salam International Centre for Theoretical Physics

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What is ICTP?

- Founded in 1964 by Nobel Laureate Abdus Salam to enhance international cooperation through science
- Combines world class research with a unique global mission of building science capacity in the developing world
- Governed by tripartite agreement between Italy, UNESCO and IAEA

ICTP is a UNESCO Category 1 institute
What is ICTP?

Research       Education       Outreach
ICTP’s international conferences encourage “Brain Gain”

- Provide training and skills to scientists mostly from developing countries
- Organise more than 60 conferences/workshops each year
- Welcome up to 5000 scientists from 145 nations each year
- Attract an additional 1000-2000 scientists/year through hosted activities
ICTP visiting scientists: where do they come from?

More than 145,000 visits since 1970
188 countries represented
In 2017, 26% of ICTP visiting scientists were women
Scientific Outreach 2017

- Affiliated Centres (13)
- Network hubs (9)
- Scientific Meetings (51)

- Schools and Workshops (15)
- ICTP Partner Institutes (4) in: Brazil, Mexico, Rwanda, China
The work on Telecommunications/ICT is done at ICTP in the framework of the Telecommunications/ICT for Development Laboratory that started operating in 1990 under the name Aeronomy and Radiopropagation Laboratory.
1989 Course on basic telecommunications science
1990 First International School on computer network analysis and management
1993 Workshop on scientific aspects of the rural communications in developing countries (with technical and financial support from ITU)
1996 Project on Nigerian Universities Network Capacity Building (Co-sponsored by the Nigerian National Universities Commission with financial support of the World Bank)
1996 ICTP-ITU(BDT) Workshop on economic quantification of the impact of telecommunication in development
ICTP and Telecommunications/ICT

Milestones

1997 ICTP-URSI-ITU/BDT School on the use of radio for digital communications in developing countries

2000 School on data and multimedia communications using terrestrial and satellite radio links

2004 ITU/ICTP Workshop on new radiocommunication technologies for ICT in developing countries (African region)

2004 Cooperation Agreement between ITU-BDT and the ICTP to collaborate in the advancement of human resources in the field of telecommunication science and technology in developing countries

2005 In the framework of the ITU/BDT-ICTP agreement the “ICT Technology Observatory and Training Unit for Developing Countries” was created at ICTP
2006 First edition on-line of the book “Wireless Networking in the Developing world”, now in its third edition. Published in English, Spanish, Arabic, Indonesian, Portuguese and French (more than 3.000.000 downloads)

2009 Development of a “Wireless Training KIT” at ICTP that includes low cost equipment and training material to hold wireless train-the-trainers workshops (financed by UNESCO)

2010 ITU/BDT supported project “Strengthening Training Capacity in Wireless networking in Africa” initiated at ICTP.

2015 First edition of on-line book “Internet of Things (IoT) in 5 days” in English and Spanish
2010 to January 2019 – 30+ activities carried out in Trieste and other countries on Wireless Sensors/IoT (http://wireless.ictp.it/Papers/IoT_training_ITU.pdf)
Under the inspiration and guidance of Dr. Marco Zennaro.

Training activities by ICTP on Telecommunications/ICT have followed technology evolution concentrating in recent years on IoT, with a strategy based on the importance of **Hand-on Training** and **State-of-the-art Technology**.
CoE Operational strategy

Based on the ICTP’s long term experience in training

- Dedicated offices facilitating visa application process for visitors and other requirements such as health insurance.
- Easy to access from 3 international airports (Trieste, Venice & Ljubljana).
- On campus accommodation (board & lodging) includes free High Speed INTERNET access and comprehensive Library.
Thank you for your attention