ICTP: a successful model of international collaboration
What is ICTP?

A successful model of international collaboration

- Leading **global** institution for scientific research and education
  --- Emphasis on developing countries ---

- Founded in **1964** by Nobel Laureate **Abdus Salam**

- Since 1995, tripartite:
  Italy (85%) + IAEA (10%) + UNESCO (1,5%)
ICTP Activities

RESEARCH

EDUCATION

OUTREACH
The progressive integration of a wide range of different disciplines - including physics, statistics, information theory, biochemistry, genetics and medicine, population genetics and game theory - and increased availability of quantitative data has led to major advances in most diverse domains of life sciences, from molecular and cell biology to terrestrial and oceanic ecology, economics and quantitative finance. The integration process between disciplines has led to the consolidation of a new research domain, which we describe as 'quantitative life sciences' to provide a sense of its breadth.
Education at ICTP

- Postgraduate Diploma Programme
- STEP (Sandwich PhD)
- PhD in main research areas
- Masters: Medical Physics, HPC, Complex Systems
Outreach Activities & Training Programmes

Fighting the “Brain Drain”

1964: Associates and Federation Schemes
Programmes at ICTP and developing countries:
conferences, workshops, schools

1983: Training & Research in Italian Laboratories (TRIL)

1985: Office of External Activities (OEA)

Also: ICTP hosts TWAS, IAP, OWSD
ICTP organizes **conferences, schools and workshops:** each year ~ **60** at ICTP and ~ **20** in developing countries

Half of them on subjects related to main research areas, the rest on many topics:

- medical physics
- optics
- nano physics
- plasma physics
- electronics
- telecommunications
- GNSS
- aeronomy
- e-learning
- entrepreneurship
- nuclear physics (IAEA)
- teacher training
- 3-D printing
from 1982 a series of activities in subjects related to this Workshop:

- Autumn Course on Geomagnetism, the Ionosphere and Magnetosphere, 21 Sep. – 11 Nov. 1982
- Spring College on Geomagnetism and Aeronomy, 2-27 Mar. 1987
- Workshop on Atmospheric Interactions: Downward and Upperward coupling in the Middle and Upper Atmosphere, 5-16 Feb. 1996
- International Advanced School on Space Weather, 2-19 May 2006

The first of a series of yearly activities carried out up to 2019 in partnership with Boston College and with the support of the UNOOSA ICG
Since 1970, over 150,000 scientists from 188 countries
ICTP’s Impact: Partner Institutions

ICTP-south American Institute for Fundamental Research
Sao Paulo, Brazil (2012)

ICTP-Asian Pacific
Beijing, China (2017)

ICTP-East-African Institute for Fundamental Research
Kigali, Rwanda (2017)

Mesoamerican Centre for Theoretical Physics
Chiapas, Mexico (2014)
ICTP Supporting Women in Science

NUMBERS

In 2017 at ICTP:
- 55 postdocs → 33% female
- 5120 visitors → 26% female

EVENTS

Career Development Workshop for Women in Physics from 9 to 13 October 2017, following two other workshops organized in 2013 and 2015

UN's International Day of Women and Girls in Science: three activities organized by ICTP
"Scientific thought and its creation is the common heritage of humankind."

Abdus Salam
Thank you