



"Scientific thought is the common heritage of humankind."

Abdus Salam

ICTP founder Abdus Salam

- ICTP is an institution that is run by scientists for scientists to support the best science possible, with special attention paid to the needs of scientists from developing countries





ICTP mission

Conducting research at the highest international standards, ICTP's mission is:

- To foster growth of advanced physics and mathematics studies, especially in developing countries
- To develop high-level scientific programmes and encourage international scientific exchange
- To provide excellent research and training facilities



Quick facts

- Founded in 1964 by Nobel Laureate Abdus Salam
- Sponsored by tripartite agreement between Italy, UNESCO and IAEA
- Attracts visiting scientists mainly from developing and least developed countries
- Provides training to improve scientific capacity in developing countries





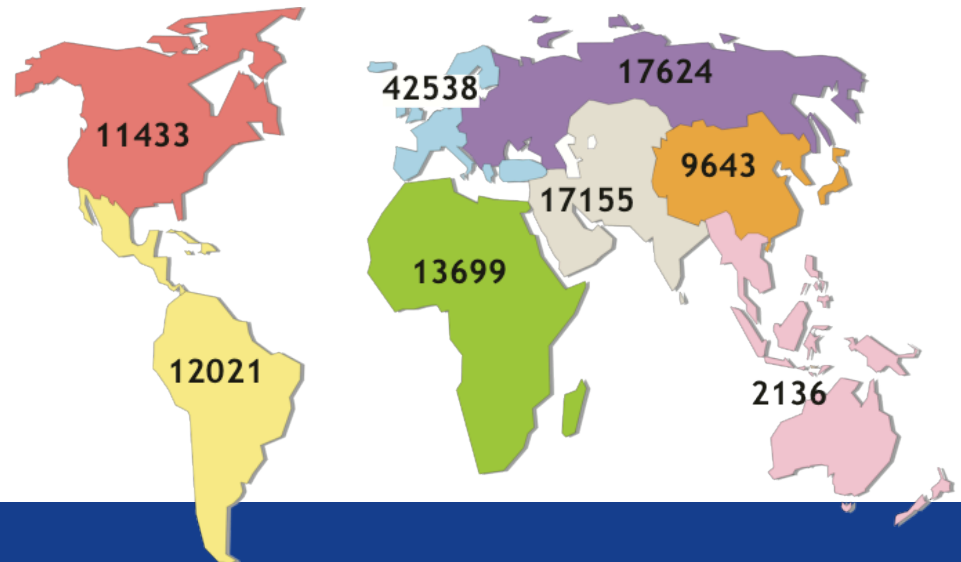
ICTP visiting scientists

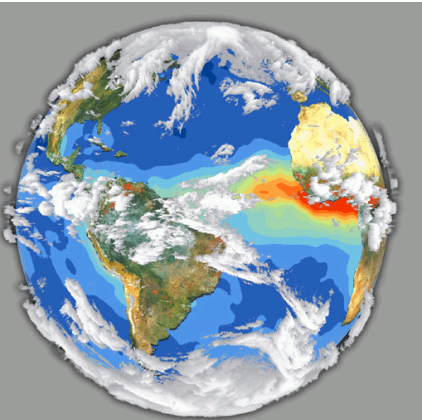
- More than 120,000 visits since 1970
- 184 countries represented
- 20% of ICTP visiting scientists are women



**Number of visits
by scientists from:**

- North America
- Latin America
- Western Europe
- Eastern Europe
- Africa
- Middle East and South East Asia
- Far East
- South East Asia and the Pacific





Research at ICTP

- High Energy, Cosmology and Astroparticle Physics
- Condensed Matter and Statistical Physics
- Mathematics
- **Earth System Physics**
- Applied Physics





Research at ICTP

- 35 staff scientists, 10 staff associates, 70 post docs and long-term visitors, 14 consultants
- Research support
 - ICTP Library holdings include 68,500 books, 320 journal subscriptions and 4,200 e-journals
 - State-of-the-art computer equipment and support
 - Publications and printing unit
 - Open access to e-journals, and digital lectures
 - African Review of Physics (Editorial and Technical Office)





ICTP training and education

- Provides training and skills to scientists from developing countries
- Organises more than 60 conferences/workshops each year
- Welcomes 4,000 to 5,000 scientists from about 130 nations each year
- Attracts an additional 1,000-2,000 scientists/year through hosted activities

Programmes

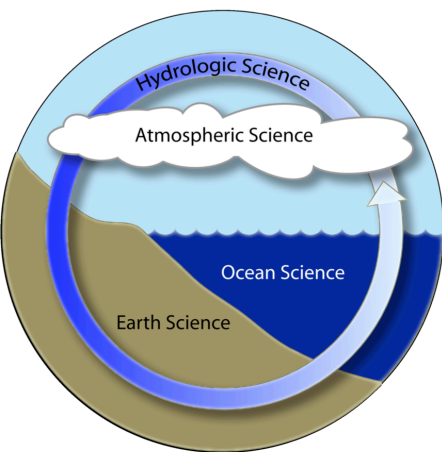
➤ Postgraduate Diploma Programme

1-year intense pre-PhD programme.

Two streams: 'Physics of Solid Earth' and 'Physics of Climate'

Students work on a research thesis with an ICTP supervisor.

Many of our students have been accepted for PhD in US and European Universities.



ESP Diploma Students from Ghana

2020



Grace AFFRAM

2020



Tawfic YAKUBU

2019



Adwoa
ABOAGYE-OKYERE
Univ. of Lille, France

2019



Jacob
TINDAN
Univ. of Kansas, US

2019

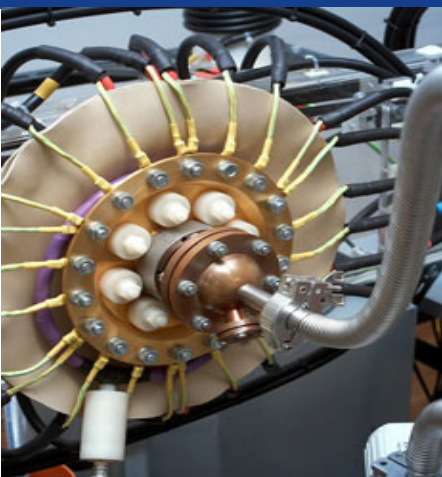


Olivia
AYIM
Univ. dell'Aquila, Italy

2018



Isaac
BAFFOUR
Univ. of Hamburg, Germany

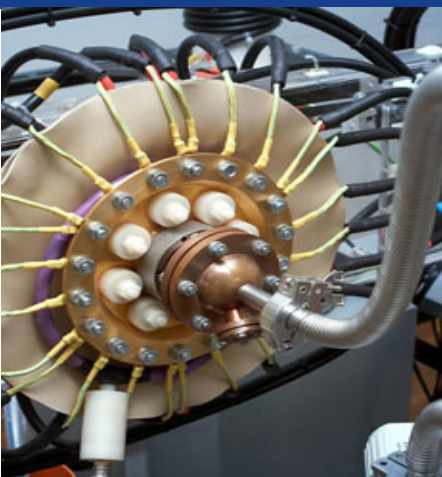


➤ Sandwich Training Educational Programme (STEP)

fellowships to PhD students from developing countries in the fields of physics and mathematics.

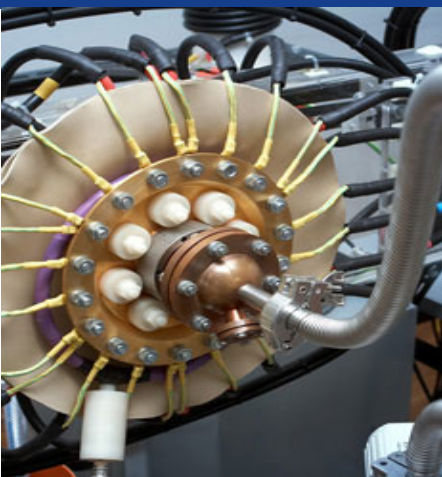
With a STEP fellowship, PhD students study at their home universities but have the financial support to visit ICTP for a three- to six-month stay each year for three successive years.

Fellows work on their PhD theses with their advisors at their home institutes and co-advisors at ICTP. Their PhD is awarded at their home institutes.



➤ OFID Postgraduate Fellowship

ICTP and the OPEC Fund for International Development (OFID) have a joint programme offering fellowships and training opportunities to PhD students in developing countries. The OFID Postgraduate Fellowships supports 15 doctoral students from developing countries to access ICTP research/training facilities for up to six months per year for three consecutive years. Fellows will carry out research/training towards their PhD within the Sandwich Training Educational Programme (STEP) scheme at ICTP



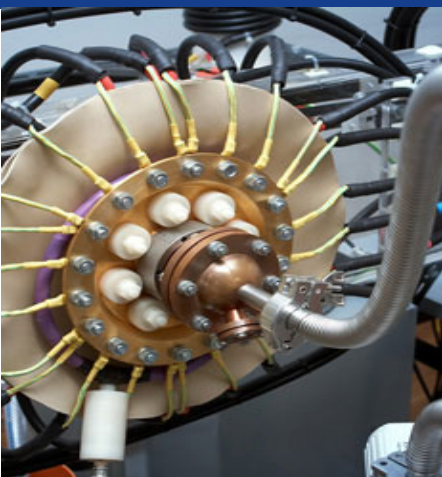
➤ **Joint PhD Programme, Earth Science and Fluid Mechanics with Trieste University**

3-year PhD programme.

Courses in common with ICTP Diploma, Math. Dept, Engineering Dept.

Funding comes from Trieste U., Italy, EU sources, ICTP.

<https://web.units.it/dottorato/esfm/>



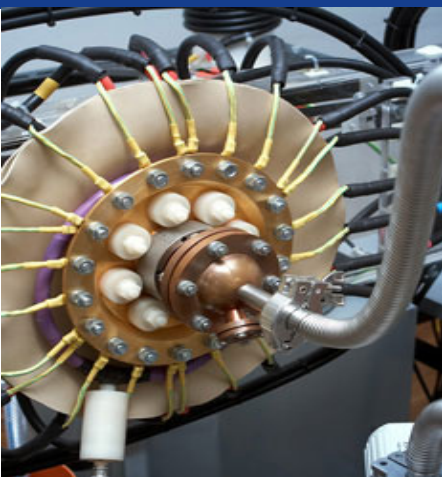
➤ Master in High Performance Computing (MHPC)

Lecturers from ICTP, SISSA, CINECA.

MHPC provides skills useful both in the academic and in the industrial field, like technical and software development.

The program combines lectures with hands-on and applied projects to prepare future HPC specialists for academia and industry.

<http://www.mhpc.it/>

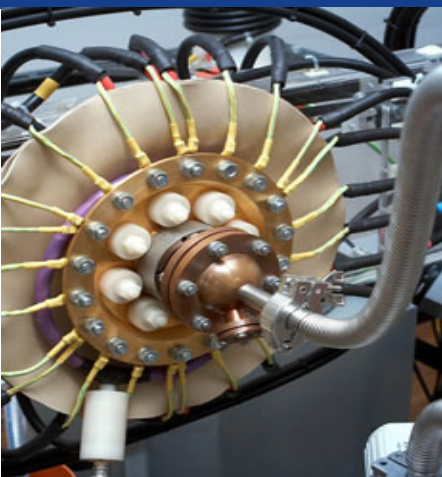


➤ Associate Schemes

Junior: promising young scientists up to the age of 35. 6-year appointment, during which associate visits ICTP three times for stays of between 30 and 60 days each.

Regular: Scientists aged between 36 and 45.

Senior: intended for scientists, over the age of 45, from and working in developing countries. 6-year appointment; unlimited visits of up to 60 days each.



➤ Training and Research in Italian Laboratories (TRIL)

The TRIL Programme offers scientists from developing countries the opportunity to undertake training and research in an Italian laboratory in different branches of the physical sciences.

Since 1983, **1328** scientists from developing countries have taken advantage of opportunities to participate in high level research in active Italian teams.



Scientific outreach

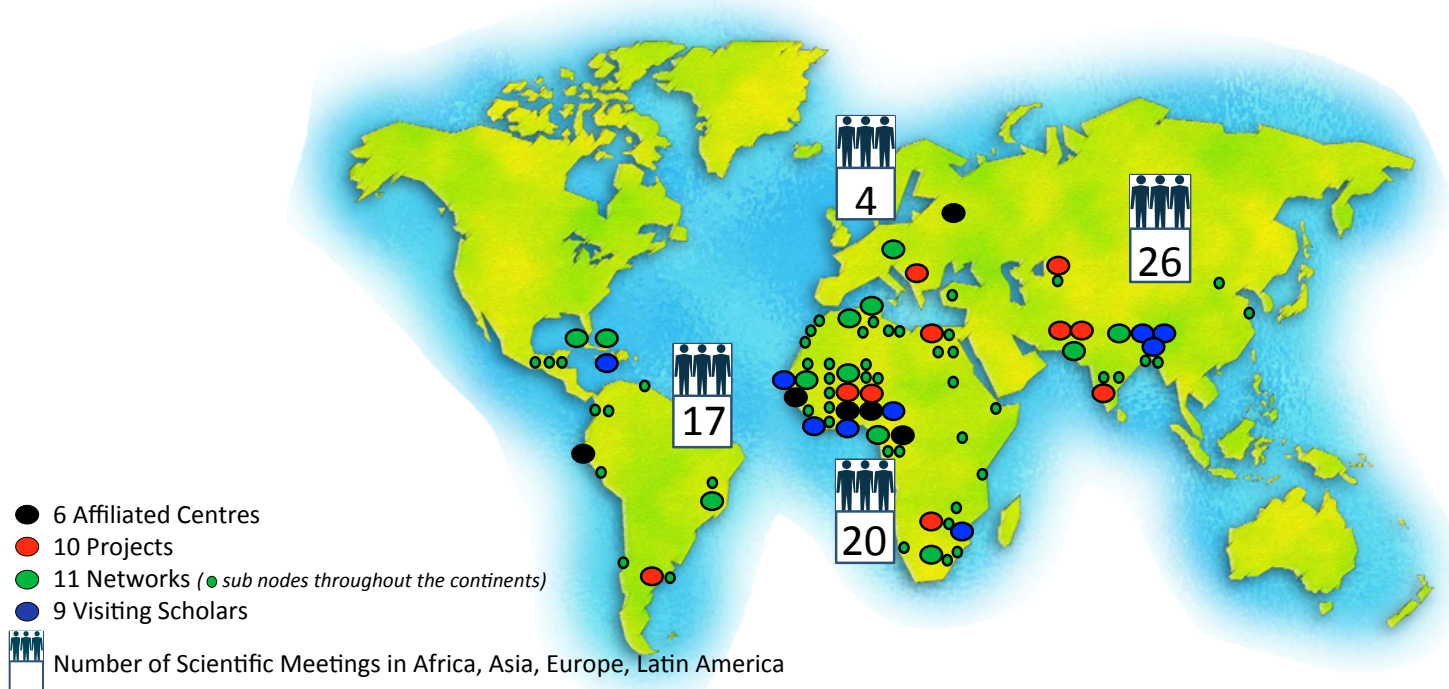
➤ Office of External Activities

- Supports external scientific activities
 - Affiliated centres
 - Networks
 - Visiting Scholars/Consultants
 - Scientific Meetings
 - Projects



Scientific outreach

➤ Spotlight: Office of External Activities in 2015





Some Workshops/Meetings of interest

- **2019** *School on Oceanic Eastern Boundary Upwelling Systems*
 - **2019** *2nd ICTP Summer School on 'Theory, Mechanisms and Hierarchical Modelling of Climate Dynamics: Convective organization and climate sensitivity'*
 - **2018** *1st ICTP Summer School on 'Theory, Mechanisms and Hierarchical Modelling of Climate Dynamics: Multiple Equilibria in the Climate System'*
- **2018** *Coastal Ocean Environment Summer School*
- **2017** *Workshop on 'The science of climate change: a focus on Central America and the Caribbean'*
- **2016** *School on 'Ocean Climate Modelling: Physical and biogeochemical dynamics of semi-enclosed seas'*

Please do apply here: <https://www.ictp.it/scientific-calendar.aspx>



... and it is also
a nice place
to visit!

