

BARCELONA INTERNATIONAL YOUTH SCIENCE CHALLENGE

Barcelona, 2nd - 12th July 2024



Fundació
Catalunya
La Pedrera



Would you like to dive into the quantum world and discover the secrets of your messages? ☄

2nd Call of Applications to the 8th edition of **Barcelona International Youth Science Challenge (BIYSC)** is **OPEN** until **April 12th**.

Discover this life-changing summer program for young aspiring scientists!

In this [BIYSC project](#) at the **Institute of Photonic Sciences (ICFO)**, we invite you to take a journey to the **core of quantum physics**, starting from its foundations, and building day by day the basis to understand the **upcoming quantum technologies and communication**.

We'll start with an introduction to the **mathematical language** (basic algebra and matrices) that will help us unfold the counterintuitive consequences of quantum physics. We will see how quantum physics is strictly connected to **information processing** and how it can improve current technologies, such as **communications, cryptography, and computing** through theoretical and practical activities in a friendly environment. **Are you ready?**

BIYSC is a **two-week international summer program of excellence**, which is committed to stimulating talent and promoting vocations among young High School students in **10th-12th year** (approximately 15-18 years old).

A total of **17 International Research Centres and Scientific and Technological Institutions** are involved in this **8th edition** of the program, enabling the creation of **17 hands-on research projects** covering a broad range of subjects across the **STEM field**.

Discover the details of the **BIYSC project** "[Quantum Physics in Communications and Cryptography for New Technologies](#)" at **ICFO**:



Are you ready to dive into the quantum world?

Participants will live a **unique experience** in a **real research environment**, conducting the project of their choice together with active scientists and researchers. Next summer, around **150 selected** aspiring scientists will enjoy **BIYSC** from **July 2nd to 12th** in **Barcelona**.

To date, we have welcomed **over 600 High School students from more than 70 countries**, and we are willing to welcome new talented students like you!

If you wish to know more about the program, you may visit www.biysc.org and download the following document:

[DOWNLOAD BIYSC 2024 LEAFLET](#)

If you have any questions we can help with, we would be very happy to clarify whatever you may need to know by email or a call. Please do not hesitate to [contact us](#) for further information.

[APPLY NOW](#)

Science moves the world forward and you are its future!

Our best regards,

The ICFO Outreach team on behalf of the BIYSC organization