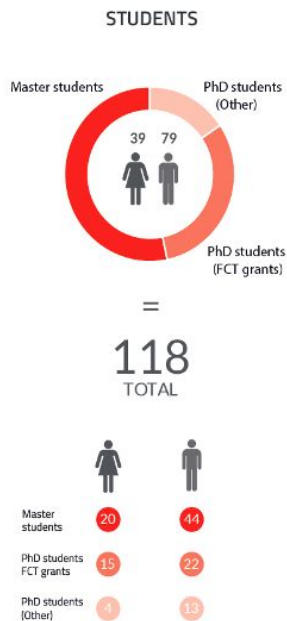


# Advanced training

## Highlights



### Student awards

**Gabriela Oliveira**

Gulbenkian "Novos Talentos" grant"

**Pedro Mendes Pereira**

"UMinho Award for Initiation in Scientific Research 2022"

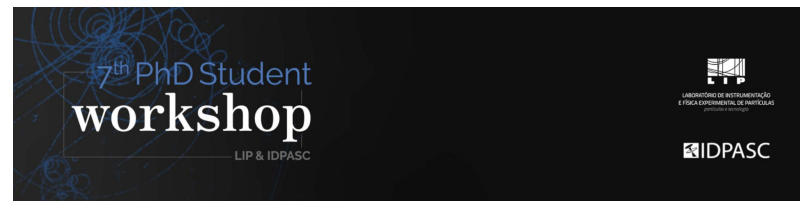
**Catarina Felgueiras**

"UMinho Award for Initiation in Scientific Research 2022"

**Maria Ramos**

"Univ. Minho best 2022 PhD thesis award "

Concluded thesis in 2022:  
26 MSc and 4 PhD



University of Coimbra, 6-7 July 2022



# Advanced training

## Highlights

### IDPASC school

LIP is a founder of the IDPASC international PhD network. The 11th edition of the school of the IDPASC network, which aim is to train a new generation of high-level experts in the fields of particle physics, astrophysics, and cosmology, took place in Olomouc, Czech Republic, gathering about 25 students.

### Students Workshops

Two-day meetings in which all PhD students present the status of their work to an audience of graduate students and researchers. Keynote lectures on selected topics (including some suggested by the students) and social events are also part of the program. In 2022 the 7th edition of the LIP/IDPASC student workshop was held in Coimbra in July and the 1st ProtoTera PhD student workshop was held at ICNAS (also in Coimbra) in November.

### LHC Physics Course

Consists of close to 20 lectures covering introduction to the standard model, detectors, statistics, and overall research, held from March through May. The course has a final evaluation valid for ECTS credits at IST.



### Outreach for undergraduates

Besides training events, LIP conducts a number of initiatives with the goal of making LIP and particle physics known and attractive among undergraduate students. In particular, LIP regularly participates in events organized by physics departments and physics student associations at the different universities.

### Schools & workshops

LIP is involved in several regular school and workshop series directed at undergraduate students, which include lectures, hands-on exercises, and introductory overviews of ongoing research activity at LIP and in particle physics and its application in general. In 2022, the following schools and workshops were held:

- 7th edition of the mini-school in particle and astroparticle physics, co-organized by LIP and CFTP: held in hybrid mode (remote lectures and in-person hand-on sessions) and gathered around 20 undergraduate students from several universities.
- Data Science school and symposium, 27-30 June, in Coimbra, an event series focused both in training and in stimulating synergies between fundamental research and industry in data science.

# Advanced training

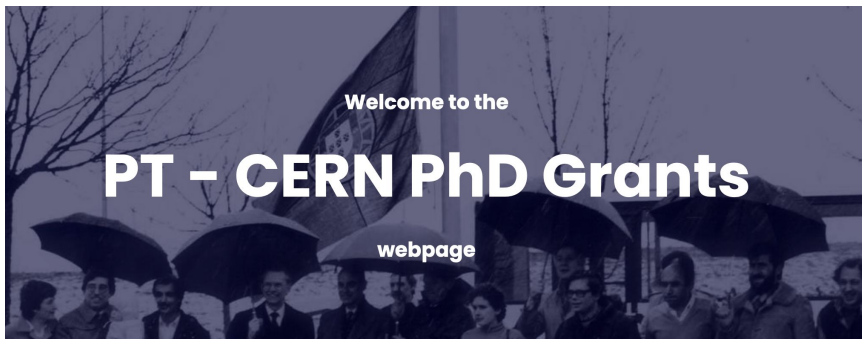
## Highlights

Graduate programs managed by LIP

- IDPASC
  - PT-CERN physics
  - PT-CERN technology
- ProtoTera
  - ProtoTera (13 grants awarded)
- DAEPHYS (last edition in 2017/18)

Summary – 2020/2022

	PT-CERN Statistics		
	Thesis Proposals	Applications	Grants awarded
1 <sup>st</sup> Call	83	15	4
2 <sup>nd</sup> Call	70	21	8
3 <sup>rd</sup> Call	74	35	9
4 <sup>th</sup> Call	56	32	9
5 <sup>th</sup> Call	62	29	6
<b>Total</b>	<b>345</b>	<b>132</b>	<b>36</b>



# Advanced training

## SWOT

### Strengths

- Motivation for attracting good students to our research and to provide excellent training
- Long experience and high reputation of LIP and LIP researchers as committed supervisors

### Weaknesses

- Limited direct funding for core Advanced Training activities
- Many LIP researchers have no (or weak) link to University

### Opportunities

- The success of past years has already gained LIP a high visibility and university students

### Threats

- High competition for students with other areas
- Unclear future of the PT-CERN PhD grant programme