Informations for the Week

Ricardo Gonçalo

(for a large team of enthusiastic researchers and lectureres!)

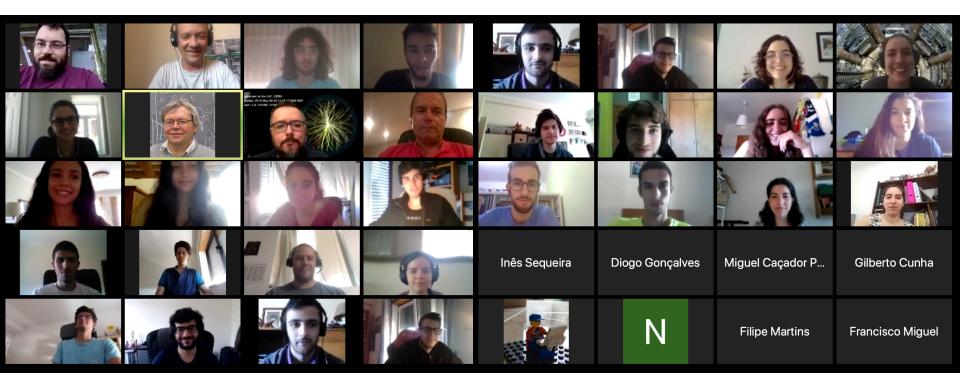# LIP Summer Internship 2017

LIP Summer Internship 2018

LIP Summer Internship 2019

LIP Summer Internship 2020

Inês Sequeira • Diogo Gonçalves • Miguel Caçador P... • Gilberto Cunha • Filipe Martins • Francisco Miguel

LIP Summer Internship 2020

NEVER GIVE UP!

The Agenda

Mornings:
Two lectures themes covered in any of your projects

Followed by tutorial chats:
your chance to **ask everything you always wanted to know about particle physics** but were afraid to ask! ☺

Afternoons:
Tutorials to **give you the tools you need for your projects**

Instructions for the afternoon tutorials

In order to follow the tutorials it is very important that you have **access to the LIP machine**s so please:

- **Create an ssh key** – instructions here:
  https://wiki.incd.pt/books/how-to-access/page/create-an-ssh-key
  and send the public one (**id_rsa.pub**) to **helpdesk@lip.pt**

- A dedicated slack workspace has been set up. Join here:
  https://join.slack.com/t/lip-internshipprogram/shared_invite/zt-fbacw5c7-Pi87gN4ipRycGp6i6oV23w
  - There is a specific channel "**lip-machines**" for questions about accessing the LIP machines, use it if necessary, we are happy to help with any questions!

- Some tutorials will **happen simultaneously** so you have to choose which one you want participate in:
  - Links to the Zoom meeting rooms will be posted in the agenda, as well as the passwords
  - Use slack to let us know if you have problems connecting

The Great Particle Challenge!

The Particle Challenge - LIP Summer Internship 2020

By the end of this week, you should know the answer to these very difficult questions!
All legitimate research techniques are allowed, including googling for the answers, solving equations, reading arcane physics books, or asking your lecturers and tutors during the week.

No fim desta semana deverás conhecer a resposta a todas estas perguntas!
Qualquer técnica legítima de investigação é permitida, incluindo o uso do google, a resolução de equações, a leitura de livros obscuros de física ou perguntar diretamente aos palestrantes ou tutores durante a semana.

Questions:

How many square metres of silicon tracking detectors are there in the CMS experiment?

How many times does each LHC beam cross the French-Swiss border per second?

How much data (in terabytes) is accumulated by each LHC experiment during one year of running?

How many Higgs bosons were produced at the LHC so far?

Use this link:
https://docs.google.com/document/d/1CEEW_IPMR6xhZO4RlVtXo8G1N5ILQFaMZPWObmIDA6Y/edit

Send your **replies** to jgoncalo@lip.pt on Friday with subject "**The Great Particle Challenge!**"

Finally: HAVE FUN!... and...

NEVER GIVE UP!

https://www.lip.pt