



**Laboratório de Instrumentação e  
Física Experimental de Partículas**

## **LIP Seminar**

Thursday, 31 of March 2022, 11h30

# **Studying the Quark Gluon Plasma at the LHC: current results and future plans**

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Collisions of heavy nuclei at high energy at the LHC provide the opportunity to study a the Quark-Gluon Plasma, a state of matter where quarks and gluons and not confined into hadrons, bu are effectively free to move over larger distances in the laboratory. In this presentation I will present highlights of the heavy-ion physics program at the LHC and discuss how the results allow us to determine the temperature and flow fields in the collision, as well as the transport properties of the QGP. In addition, I will outline the plans of the ALICE experiment for the upcoming Run 3 and 4 and beyond, highlighting new capabilities for the study of the QGP that are provided by the recently installed and future detector upgrades.

**Location: Videoconference - Zoom**

**Connection details**

**<https://indico.lip.pt/event/1200/>**

**URL: <https://videoconf-colibri.zoom.us/j/82855815555>**

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