

LIP Summer Internships - Lectures and Tutorials Week

Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome to LIP and instructions

Monday, 3 July 2023 09:30 (30 minutes)

Presenter: ANDRINGA, Sofia (LIP)

Session Classification: Introduction to particle physics and detectors

Contribution ID: 2

Type: **not specified**

Introduction to particle physics

Monday, 3 July 2023 11:00 (1 hour)

Presenter: PIMENTA, Mário (LIP)

Session Classification: Introduction to particle physics and detectors

Contribution ID: 3

Type: **not specified**

Introduction to LHC physics

Monday, 3 July 2023 12:00 (30 minutes)

Presenter: LEONARDO, Nuno (LIP)

Session Classification: Introduction to particle physics and detectors

Contribution ID: 4

Type: **not specified**

Detectors

Monday, 3 July 2023 10:00 (30 minutes)

Presenter: BLANCO, Alberto (LIP)

Session Classification: Introduction to particle physics and detectors

Contribution ID: 5

Type: **not specified**

Introduction to computer tools used in HEP (GitHub, Notion)

Monday, 3 July 2023 14:00 (3 hours)

Zoom link: <https://videoconf-colibri.zoom.us/j/99704310329?pwd=V2c0VnJ4d3JtaGgxdG5FNE5tZVRoZz09>

Presenters: LOUREIRO, Leonor (GitHub); SOUSA, Tomás (LIP)

Session Classification: Tutorials: Day 1

Contribution ID: 6

Type: **not specified**

Introduction to C++

Monday, 3 July 2023 14:00 (3 hours)

Zoom link: <https://videoconf-colibri.zoom.us/j/94762743041?pwd=OWlmaHRtTkVEZzBJNW0wSW5ldW9xUT09>
(local support in Lisbon: Pedro Costa, Lucio Gibilisco)

Presenters: CASALINHO, Francisco (LIP); SALTÃO, Sandro (LIP-Coimbra)

Session Classification: Tutorials: Day 1

Contribution ID: 7

Type: **not specified**

Probing the standard model and beyond at the LHC

Tuesday, 4 July 2023 09:30 (30 minutes)

Presenter: CASTRO, Nuno (LIP and University of Minho)

Session Classification: LHC, Machine Learning and QCD

Contribution ID: 8

Type: **not specified**

Machine learning in particle physics

Tuesday, 4 July 2023 10:00 (30 minutes)

Presenter: PEDRO, Rute (LIP)

Session Classification: LHC, Machine Learning and QCD

Contribution ID: 9

Type: **not specified**

The life of PhD/MSc students studying LHC

Tuesday, 4 July 2023 10:30 (30 minutes)

Presenters: PISANO, Matteo (LIP); BARROS, Maura; PEIXOTO, Miguel (LIP)

Session Classification: LHC, Machine Learning and QCD

Contribution ID: **10**

Type: **not specified**

QCD and heavy ion physics

Tuesday, 4 July 2023 11:30 (30 minutes)

Presenter: VILA PÉREZ, Víctor (LIP / IGFAE)

Session Classification: LHC, Machine Learning and QCD

Contribution ID: 11

Type: **not specified**

Machine learning

Tuesday, 4 July 2023 14:00 (3 hours)

Zoom link: <https://videoconf-colibri.zoom.us/j/99704310329?pwd=V2c0VnJ4d3JtaGgxdG5FNE5tZVRoZz09>

Presenters: NEIVA, Céu; PEIXOTO, Miguel (LIP)

Session Classification: Tutorials: Day 2

Contribution ID: 12

Type: **not specified**

ROOT basics

Tuesday, 4 July 2023 14:00 (3 hours)

Zoom link: <https://videoconf-colibri.zoom.us/j/94762743041?pwd=OWlmaHRtTkVEZzBJNW0wSW5ldW9xUT09>
(local support in Lisbon: Giovanni Marozzo)

Presenter: PEREIRA, Guilherme (LIP)

Session Classification: Tutorials: Day 2

Contribution ID: 13

Type: **not specified**

Astroparticle physics

Wednesday, 5 July 2023 09:30 (30 minutes)

Presenter: SARMENTO, Raul (LIP)

Session Classification: Astroparticles, dark matter and neutrinos

Contribution ID: 14

Type: **not specified**

Dark matter

Wednesday, 5 July 2023 10:00 (30 minutes)

Presenter: BRÁS, Paulo (LIP)

Session Classification: Astroparticles, dark matter and neutrinos

Contribution ID: 15

Type: **not specified**

The life of PhD/MSc students studying dark matter and neutrinos

Wednesday, 5 July 2023 10:30 (30 minutes)

Presenters: FERNANDES, Alexandra (LIP); SOARES, Guilherme (Universidade de Lisboa, IST (PT)); VENCES, Joana (LIP)

Session Classification: Astroparticles, dark matter and neutrinos

Contribution ID: **16**

Type: **not specified**

Neutrinos

Wednesday, 5 July 2023 14:00 (30 minutes)

Presenter: LOZZA, Valentina (LIP)

Session Classification: Tutorials: Day 3

Contribution ID: 17

Type: **not specified**

Python tools in high-energy physics

Wednesday, 5 July 2023 14:30 (2h 30m)

Zoom link: <https://videoconf-colibri.zoom.us/j/99704310329?pwd=V2c0VnJ4d3JtaGgxdG5FNE5tZVRoZz09>

Presenter: BARROS, Maura

Session Classification: Tutorials: Day 3

Contribution ID: **18**

Type: **not specified**

ROOT intermediate

Wednesday, 5 July 2023 14:30 (3 hours)

Zoom link: <https://videoconf-colibri.zoom.us/j/94762743041?pwd=OWlmaHRtTkVEZzBJNW0wSW5ldW9xUT09>
(local support in Lisbon: Wallison Campanelli)

Presenters: FERNANDES, Alexandra (LIP); DUARTE, Magda

Session Classification: Tutorials: Day 3

Contribution ID: **19**

Type: **not specified**

Particles and health

Thursday, 6 July 2023 09:30 (30 minutes)

Presenter: CRESPO, Paulo (LIP)

Session Classification: Health, dosimetry and society

Contribution ID: **20**

Type: **not specified**

Detector and physics simulations

Thursday, 6 July 2023 10:00 (30 minutes)

Presenter: Dr TEUBIG, Pamela (LIP)

Session Classification: Health, dosimetry and society

Contribution ID: 21

Type: **not specified**

The life of PhD/MSc students studying exotic nuclei and radiation in space

Thursday, 6 July 2023 10:30 (30 minutes)

Presenters: FELGUEIRAS, Carolina (LIP); MIGUEL, Diogo (LIP); GERALDES BARBA, Francisco (LIP - FCUL); SOUSA, Tomás (LIP)

Session Classification: Health, dosimetry and society

Contribution ID: 22

Type: **not specified**

Social physics

Thursday, 6 July 2023 11:30 (30 minutes)

Presenter: REIS, José (LIP)

Session Classification: Health, dosimetry and society

Contribution ID: 23

Type: **not specified**

Simulation using TOPAS

Thursday, 6 July 2023 14:00 (3 hours)

Zoom link: <https://videoconf-colibri.zoom.us/j/99704310329?pwd=V2c0VnJ4d3JtaGgxdG5FNE5tZVRoZz09>

Presenter: ANTUNES, Joana (LIP/FCUL)

Session Classification: Tutorials: Day 4

Contribution ID: 24

Type: **not specified**

Data analysis and fitting with ROOT

Thursday, 6 July 2023 14:00 (3 hours)

Zoom link: <https://videoconf-colibri.zoom.us/j/94762743041?pwd=OWlmaHRtTkVEZzBJNW0wSW5ldW9xUT09>

Presenters: BOLETTI, Alessio; SOARES, Guilherme (Universidade de Lisboa, IST (PT)); LEONARDO, Nuno (LIP)

Session Classification: Tutorials: Day 4

Contribution ID: 25

Type: **not specified**

The internal structure of particles

Friday, 7 July 2023 09:30 (30 minutes)

Presenter: PEÑA, Teresa (LIP)

Session Classification: Particles, exotic nuclei and radiation in space

Contribution ID: 26

Type: **not specified**

Dosimetry

Friday, 7 July 2023 10:00 (30 minutes)

Presenter: SAMPAIO, Jorge (LIP / FCUL)

Session Classification: Particles, exotic nuclei and radiation in space

Contribution ID: 27

Type: **not specified**

The life of PhD/MSc students studying biophysics, dosimetry and exotic nuclei

Friday, 7 July 2023 10:30 (30 minutes)

Presenters: TORCATO, André (LIP); COELHO, Carina; GUERREIRO, Duarte (LIP); LEITÃO, Luis (LIP); PAULINO, Margarida (LIP)

Session Classification: Particles, exotic nuclei and radiation in space

Contribution ID: 28

Type: **not specified**

Radiation environment in space

Friday, 7 July 2023 11:30 (30 minutes)

Presenter: ARRUDA, Luísa (LIP)

Session Classification: Particles, exotic nuclei and radiation in space

Contribution ID: 29

Type: **not specified**

Future steps for physics students

Friday, 7 July 2023 12:00 (30 minutes)

Presenter: Dr GOSH, Pradeep

Session Classification: Particles, exotic nuclei and radiation in space

Contribution ID: 31

Type: **not specified**

Science communication and writing

Friday, 7 July 2023 14:00 (3 hours)

Zoom link: <https://videoconf-colibri.zoom.us/j/94762743041?pwd=OWlmaHRtTkVEZzBJNW0wSW5ldW9xUT09>

Presenters: ESPIRITO SANTO, Catarina (LIP); Dr TEUBIG, Pamela (LIP)

Session Classification: Tutorials: Day 5

Contribution ID: 32

Type: **not specified**

Exotic nuclei

Thursday, 6 July 2023 12:00 (30 minutes)

Presenter: GALAVIZ, Daniel (LIP)

Session Classification: Health, dosimetry and society