

Jornadas LIP - 2020


📅 14 Feb 2020, 08:00 → 16 Feb 2020, 18:00 UTC

📍 Auditório B1, Edifício 2 (LIP Minho)

Description **Welcome to the LIP Jornadas 2020!**

The Jornadas are national meetings promoting the sharing and the discussion among all LIP members.

Once every two years, we discuss ideas, find synergies, start common projects. This is also a privileged moment for the younger members to get to know LIP better and to introduce themselves.

Registration  You are registered for this event.

Participants  Agostinho Gomes  Alberto Blanco  Alexandre Lindote  Alexandre Trindade  Alfred Stadler  Amelia Maio
 Ana Luisa Carvalho  Ana Luísa Lopes  Ana Oliveira  Ana Peixoto  Ana Sofia Inácio  Andrey Morozov
 Antonio Onofre  António Pina  Beatriz Pereira  Bernardo Almeida  Bernardo Tomé  carlos silva
 Catarina Quintans  Celso Franco  Claudio Frederico Pascoal da Silva  Conceição Abreu  Diogo Barros
 Diogo Bastos  Douglas Lima  Elias Lopez Asamar  Elmar Biernat  Emanuel Gouveia  felix rieh
 Fernando Barao  Filipe Cuim  Filipe Martins  Filipe Veloso  Francisco Geraldés Barba  Francisco Neves
 Fátima Alcaso  Gernot Eichmann  Giovanni La Mura  Grigorios Chachamis  Guilherme Guedes  Guilherme Milhano
 Guilherme Pereira  Guilherme Soares  Guiomar Evans  Helena Santos  Helmut Wolters  Henrique Carvalho
 Hugo Gomes  Hugo Simões  Joana Antunes  Joao Gentil Mendes Saraiva  Joao Pedro Santos  Joao Pires
 Jonathan Hollar  Jorge Gomes  Jorge Maia  Jorge Moreira  Jorge Sampaio  Jose Carlos Aparicio
 Jose Carlos Fernandes Nogueira  Jose Maneira  José Carlos Silva  José Fernandes  José Pedro Ferreira Alves
 João Antunes  João Fernando Silva  João Gonçalves  João Machado  João Martins  João Pina  João Varela
 Laura Peres  Liliana Apolinário  Luis Coelho  Luis Lopes  Luis Seabra  Luís Afonso  Luís Margato
 Luís Sintra  Luísa Arruda  Manuel Xarepe  Marcia Quaresma  Marcin Stolarski  Marco Pinto
 Maria do Céu Neiva  Maria Ofélia Janeiro  Maria Ramos  Mariana Araujo  Mario David  Mario Pimenta
 Matthew Cox  Maura Barros  Michele Gallinaro  Miguel Alves  Miguel Crispim Romao  Miguel Ferreira
 Miguel Ralha  Miguel Reis Orcinha  Natalia Antunes  Nuno Barros  Nuno Castro  Nuno Dias  Nuno Leonardo
 Oleksii Toldaiev  Patricia Conde Muiño  Patricia Gonçalves  Paula Bordalo  Paulo Brás  Paulo Crespo
 Paulo Fonte  Pedro Abreu  Pedro Assis  Pedro Lagarelos  Pedro Teixeira  Pietro Faccioli  Raul Sarmiento
 Ricardo Barrué  Ricardo Cabrita  Ricardo Faria  Ricardo Gonçalo  Ricardo Luz  Ricardo Saraiva  Rita Silva
 Ruben Conceição  Rui Alves  Rui Fernandez  Rui Marques  Rute Pedro  Salvatore Davide Porzio

Support  natalia@lip.pt
 +351-210493611

FRIDAY, 14 FEBRUARY

14:20 → 14:30 **Opening and Welcome** ⌚ 10m

14:30 → 17:10 **Session: 1**

- 14:30 **LUX-ZEPLIN overview and status** ⌚ 10m
Speaker: Ricardo Cabrita (LIP-Coimbra)
- 14:44 **Search for rare xenon decays and study of the Migdall effect in LZ** ⌚ 15m
Speaker: Paulo Braz (LIP)
- 15:03 **Measurement of optical properties of PTFE** ⌚ 5m
Speaker: Davide Porzio (LIP-Coimbra)
- 15:10 **The SHiP experiment at CERN and the role of the LIP group within the collaboration** ⌚ 10m
Speaker: Celso Franco (LIP)
- 15:23 **Optimisation of the selection of Hidden Particles at SHiP** ⌚ 5m
Speaker: Guilherme Soares (Universidade de Lisboa, IST (PT))
- 15:30 **Neutrino Physics** ⌚ 25m
Speaker: Nuno Barros (LIP)
- 16:00 **AMS** ⌚ 20m
Speaker: Fernando Barão (LIP)
- 16:25 **Computing** ⌚ 35m
Speaker: Jorge Gomes (LIP)

- 17:10 **A global approach to the phenomenology of Little Higgs models** ⌚ 20m
Speaker: Guilherme Guedes
- 17:10 **BigDataHEP, Machine learning for LHC data: searching for new physics phenomena** ⌚ 20m
Speaker: Rute Pedro [\(LIP\)](#)
- 17:10 **DCS of ATLAS Roman Pots Upgrade for Run 3** ⌚ 20m
Speaker: Luis Seabra [\(LIP\)](#)
- 17:10 **Determination of printed circuit boards's manufacturing conditions by SLE-HPLC-MS and machine learning methods. Development of a data augmentation technique for chemical data** ⌚ 20m
Speaker: Diogo Barros [\(LIP/Minn\)](#)
- 17:10 **Determination of the Higgs CP properties in hadron colliders** ⌚ 20m
Speaker: Susana Santos [\(LIP Coimbra\)](#)
- 17:10 **Non-minimal composite Higgs models: phenomenology** ⌚ 20m
Speaker: Maria Ramos
- 17:10 **Probing the CP nature of the Higgs coupling to top quarks with the ATLAS experiment** ⌚ 20m
Speaker: Emanuel Gouveia [\(LIP\)](#)
- 17:10 **Search for Flavour Changing Neutral Currents interactions in the tZq vertex with the ATLAS Experiment at 13 TeV** ⌚ 20m
Speaker: Ana Peixoto [\(LIP\)](#)
- 17:10 **Search for the Supersymmetric partner of the top quark at the LHC with multivariate approach** ⌚ 20m
Speaker: Diogo Bastos [\(LIP\)](#)
- 17:10 **Search for vector-like quarks with the ATLAS Experiment** ⌚ 20m
Speaker: Tiago Vale [\(LIP\)](#)
- 17:10 **Sensitivity to anomalous HWW couplings at ATLAS** ⌚ 20m
Speaker: Ricardo Barru  [\(LIP\)](#)
- 17:10 **The ATLAS Hardware Track Trigger fast simulation** ⌚ 20m
Speaker: Ana Luisa Carvalho [\(LIP\)](#)
- 17:10 **TileCal DCS Phase II Upgrade** ⌚ 20m
Speaker: Filipe Martins [\(LIP\)](#)
- 17:10 **title to be announced** ⌚ 20m
Speaker: Rui Ferndez
- 17:10 **title to be decided** ⌚ 20m
Speaker: Filipe Cuim

17:30 → 18:45 **Session: 10 Years of LIP-Minho**

Convener: Raul Sarmento [\[LIP\]](#)

17:30 **LIP Minho - 10th Anniversary Celebration - Opening Session** ⌚ 10m

Speakers: Prof. António Cunha [\[Laboratório Colaborativo em Transformação Digital - UMinho\]](#), Prof. Mário Pimenta [\[LIP and I5T\]](#)

17:40 **Round table: how did I become a LIP-Minho student and how do I see the future** ⌚ 30m

Speakers: Ana Peixoto [\[LIP\]](#), Céu Neiva, Emanuel Gouveia [\[LIP\]](#), Maria Ramos [\[LIP\]](#), Raul Sarmento [\[LIP\]](#)

18:10 **LIP-Minho: past, present and future** ⌚ 20m

Speakers: António Onofre [\[LIP and University of Minho\]](#), Nuno Castro [\[LIP and University of Minho\]](#)

18:30 **Closing session** ⌚ 15m

Speaker: Prof. Rui Vieira de Castro [\[Reitor da Universidade do Minho\]](#)

18:45 → 19:30 **Cake, Porto Wine, and Poster Session 1** ⌚ 45m

SATURDAY, 15 FEBRUARY

09:00 → 10:55 **Session: 2**

09:00 **ATLAS: Introduction to LIP-ATLAS activities** ⌚ 4m

Speaker: Patricia CONDE MUIÑO [\[LIP\]](#)

09:06 **ATLAS: Higgs and Heavy Ion Physics** ⌚ 9m

Speaker: Emanuel Gouveia [\[LIP\]](#)

09:17 **ATLAS: Top precision measurements and searches for exotic particles at ATLAS** ⌚ 9m

Speaker: Tiago Vale [\[LIP\]](#)

09:28 **ATLAS: High Voltage Distribution System for the TileCal Upgrade** ⌚ 9m

Speaker: Agostinho Gomes [\[LIP\]](#)

09:39 **ATLAS: Calibration of the TileCal hadronic calorimeter** ⌚ 9m

Speaker: Rute Pedro [\[LIP\]](#)

09:50 **CMS: Introduction (including Rare Decays, B Physics, Heavy Ions, Quarkonia)** ⌚ 14m

Speaker: Nuno Leonardo [\[LIP\]](#)

10:07 **CMS: The Precision Proton Spectrometer** ⌚ 9m

Speaker: Jonathan Hollar [\[LIP\]](#)

10:19 **CMS: Top quarks and tau leptons** ⌚ 9m

Speaker: Alex Toldaiev [\[CMS LIP\]](#)

10:31 **CMS: Searches for the supersymmetric partner of the top quark** ⌚ 9m

Speaker: Diogo Bastos [\[LIP\]](#)

10:43 **CMS/Tagus: The MIP Timing Detector for the CMS Phase-2 Upgrade** ⌚ 9m

Speaker: Tahereh Niknejad [\[LIP\]](#)

10:55 → 11:25 **Coffee and Cookies** ⌚ 30m

11:25 → 13:10 **Session: 3**

Convener: Nuno Leonardo [\(L, P\)](#)

11:25 | **Phenomenology: Report of the Pheno Group** ⌚ 22m

Speaker: Liliana Apolinário [\(L, P\)](#)

11:52 | **Phenomenology: Composite Higgs models** ⌚ 8m

Speaker: Maria Ramos

12:05 | **Auger** ⌚ 30m

Speaker: Pedro Assis [\(L, P\)](#)

12:45 | **LATTES** ⌚ 20m

Speaker: Rúben Conceição [\(L, P\)](#)

13:10 → 14:30 **Lunch** ⌚ 1h 20m

14:30 → 16:25 **Session: 4**

Convener: Guilherme Milhano [\(L, P\)](#)

14:30 | **COMPASS and AMBER activities** ⌚ 20m

Speakers: Marcia Quaresma [\(L, P\)](#), Marcin Stolarski [\(L, P\)](#)

14:55 | **NPSTRONG: From quarks to nucleons and nuclei.** ⌚ 20m

Speaker: Teresa Peña

15:20 | **LERHI (NUC-RIA + HADES) activities** ⌚ 25m

Speakers: Alberto Blanco [\(L, P\)](#), Daniel Galaviz [\(L, P\)](#)

15:50 | **LIP-ECO: Communication, Outreach, Education and Advanced Training - some highlights** ⌚ 30m

Speakers: Ana Sofia Inácio [\(L, P\)](#), Luís Afonso, Nuno Leonardo [\(L, P\)](#)

- 16:25 **AlphaN background analysis in scintillator for SNO+** ⌚ 30m
Speaker: Matthew Cox (LIP & University of Liverpool)
- 16:25 **AMBER experiment at CERN** ⌚ 30m
Speaker: Rita Silva
- 16:25 **Charge and time signal modelization in SNO+ using a numerical grid method** ⌚ 30m
Speaker: João Antunes
- 16:25 **Determination of $^{118}\text{Sn}(p,\gamma)^{119}\text{Sb}$ cross-section at astrophysical energies from X-ray emission yields** ⌚ 30m
Speaker: Manuel Xarepe
- 16:25 **Development of the Underground Processing Monitor for LZ** ⌚ 30m
Speaker: João Silva (LIP Coimbra)
- 16:25 **EOSC-Synergy: Extending EOSC coordination at the National level** ⌚ 30m
Speakers: João Pina (LIP), Mário David (LIP), Samuel Bernardo (LIP)
- 16:25 **First Experimental Campaigns at FAIR: Heavy Ion Tracker Systems Based on Scintillating fibres** ⌚ 30m
Speaker: Beatriz Pereira
- 16:25 **INVERSE-ALPHA: A new approach to measure the elastic scattering of α particles in inverse kinematics at energies around the Coulomb barrier for the astrophysical p-process** ⌚ 30m
Speaker: Francisco Geraldes Barba
- 16:25 **Medida da atenuação de raios cósmicos num edifício** ⌚ 30m
Speaker: José Pedro Alves
- 16:25 **Optical Calibration in the SNO+ Water Phase** ⌚ 30m
Speaker: Ana Sofia Inácio (LIP)
- 16:25 **Particle Energy Spectra Reconstruction of the MFS Data using Machine Learning Techniques** ⌚ 30m
Speaker: Luís Sintra
- 16:25 **Prototype Detector for Neutrinoless Double Beta Decay Studies** ⌚ 30m
Speaker: Fátima Alcaso
- 16:25 **Rootless Containers with Udocker** ⌚ 30m
Speakers: Jorge Gomes (LIP), Mário David (LIP)
- 16:25 **Simulações da eficácia da radiosensibilização de nanopartículas em terapia com prótons** ⌚ 30m
Speaker: Joana Antunes
- 16:25 **Study by Simulation and Reconstruction of a Brain-Dedicated Positron Emission Tomograph Based on Resistive Plate Chambers** ⌚ 30m
Speaker: Ana Luísa Lopes
- 16:25 **The nervous system for the LUX-ZEPLIN experiment** ⌚ 30m
Speaker: Guilherme Pereira (LIP)

16:55 → 19:00 **Session: 5**

Convener: Helmut Wolters (LIP)

- 16:55 **Big Data and Simulation Competence Centre: Machine Learning** ⌚ 20m
Speaker: Miguel Crispim Romao (LIP)
- 17:18 **Big Data and Simulation Competence Centre: Simulation** ⌚ 10m
Speaker: Raul Sarmiento (LIP)
- 17:30 **Monitoring and Slow Control Competence Centre: Status and Future Work** ⌚ 10m
Speaker: Francisco Neves (LIP Coimbra)
- 17:45 **Mechanical Workshop Status** ⌚ 15m
Speaker: Alberto Blanco (LIP)
- 18:05 **DL 2018-2019 report** ⌚ 15m
Speaker: Luis Lopes (LIP Coimbra)
- 18:25 **LOMaC** ⌚ 10m
Speaker: Joao Gentil Mendes Saraiva (LIP)
- 18:40 **ECR-Lab** ⌚ 10m
Speaker: Pedro Assis (LIP)

SUNDAY, 16 FEBRUARY

08:30 → 10:15 **Session: 6**

Convener: Alexandre Lindote (LIP)

- 08:30 **RPC R&D activities** ⌚ 20m
Speaker: Alberto Blanco (LIP)
- 08:55 **10B-RPC based Neutron Imaging Detectors** ⌚ 10m
Speaker: Dr Luis Margato (Laboratório de Instrumentação e Física Experimental de Partículas)
- 09:10 **Actividades de I&D em xénon líquido** ⌚ 10m
Speaker: Vitaly Chepel (LIP)
- 09:25 **Estudo das características de misturas gasosas baseadas em gás raro como meio de deteção** ⌚ 20m
Speaker: Trindade Alexandre (LIP Coimbra)
- 09:50 **SpaceRad** ⌚ 25m
Speaker: Patricia Gonçalves (LIP)

10:15 → 10:45 **Coffee and Cookies** ⌚ 30m

10:45 → 13:15 **Session: 7**

Convener: Luis Margato (Laboratório de Instrumentação e Física Experimental de Partículas)

- 10:45 **iAstro: Resumo das atividades principais do grupo** ⌚ 5m
Speaker: Jorge Maia (LIP)
- 10:55 **iAstro: Apresentação do projeto STRATOSPOLCA** ⌚ 15m
Speakers: David Neves, Joana Afilhada, Maria Inês Ferreira, Rui Curado Silva (LIP)
- 11:15 **Proton therapy** ⌚ 10m
Speaker: Patricia Gonçalves (LIP)
- 11:30 **Compact gamma camera: from design to prototype** ⌚ 15m
Speaker: João Marcos (LIP Coimbra)
- 11:50 **Orthogonal prompt-gama imaging (O-PGI) for monitoring proton therapy: feasibility studies** ⌚ 15m
Speaker: Paulo Crespo (LIP)
- 12:10 **Development of new instruments and methods for dosimetry in proton therapy.** ⌚ 15m
Speaker: Jorge Sampaio (LIP / FCUL)
- 12:30 **Radon exhalation from building materials.** ⌚ 5m
Speaker: Prof. Sandra Soares (LIP)
- 12:40 **LIP: Present and Future** ⌚ 20m
Speaker: Mário Pimenta (LIP)