



LABORATÓRIO DE INSTRUMENTAÇÃO
E FÍSICA EXPERIMENTAL DE PARTÍCULAS
partículas e tecnologia

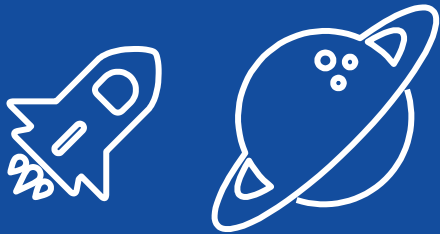
[LIP-ECO]

est. 2016

The bottom of the slide features a horizontal strip of three images, all with a blue tint. From left to right: a close-up of a circular detector component with several ports; a large, complex particle detector structure, possibly a calorimeter, with many layers and components; and a close-up of a circuit board with various electronic components and connectors.

C. Espírito Santo for the LIP-ECO group, Jornadas do LIP, Évora, Feb 2018

Education **C**ommunication **O**utreach



Why does it matter?

- **It's part of our social role**
- **Essential for the recognition of our work's relevance**
- **Helps attracting funds, partnerships, opportunities**
- **Helps attracting students and researchers**

... it really matters!

Map of the ECO session

Part 1 – Reports

LIP-ECO1: Communication *(C. Esp Santo)*

LIP-ECO2: Outreach *(P. Abreu)*

LIP-ECO3: Advanced training *(N. Leonardo)*

Part 2 – Highlights

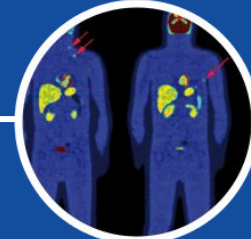
Internal comms survey *(L. Coimbra)*

Outreach in Minho *(H. Carvalho)*

Outreach in Coimbra *(F. Neves)*

Conferences in PT *(C. Abreu, P. Bordalo, H. Santos)*

LIP-ECO 1 Communication



"Organisational communication is mostly invisible; it acts, rather than talking about itself"

LIP's communication strategy document

"During the past year [communication and outreach at LIP] has reached a new level of professionalism by developing a broad communication strategy and establishing LIP-ECO"

LIP's international Advisory board
May 2017

This document is the **roadmap** for LIP's communications activities and public profile.

1. Communication objectives
2. Mission, positioning, vision and values
3. Key Messages
4. Audiences
5. Channels
6. Creation of LIP brand

www.lip.pt/eco/documents/CommStrategy.pdf

Priority **target audiences**

- **Our peers – research centres, universities, funding agencies**
- **Undergraduate students in Physics and Engineering**
- **Internal communications**
- **School community**

What have we been doing?

Promote LIP's work

Reports

FCT
Evaluation

LIP
Web

Social
media

Press /
Media

Support
event
comm

Close
colab with
computing
group

Internal
Comm
survey

Contacts
with groups

Contacts
with other
institutions

SciCom
conferenc
es

SciCom
training

Branding

Contents
and
materials

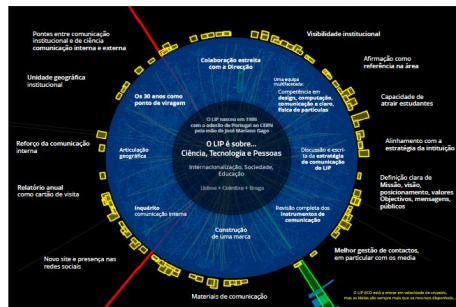
The team: Cat Esp Santo, Pedro Abreu, Ricardo Gonalo, Carlos Manuel, Hugo Gomes, Leonor Coimbra, Aidan Kelly, Sofia Andringa, Conceio Abreu, Henrique Carvalho, Nuno Castro, Francisco Neves

What have we been doing?

SciCom conferences

LABORATÓRIO DE INSTRUMENTAÇÃO E FÍSICA EXPERIMENTAL DE PARTÍCULAS

A construção do gabinete de comunicação do LIP DA ESTRATÉGIA AOS RESULTADOS



LIP-REC Education, Communication, Outreach: Pedro Alves, Sofia Andrade, Leonor Coimbra, Catarina Espírito Santo, Hugo Gomes, Ricardo Gonçalves, Carlos Manuel

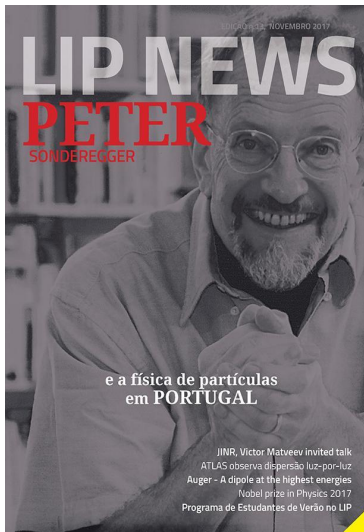
SciCom training



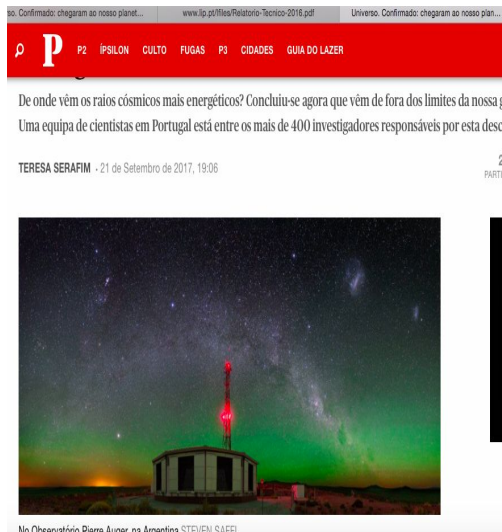
Reports & evaluations



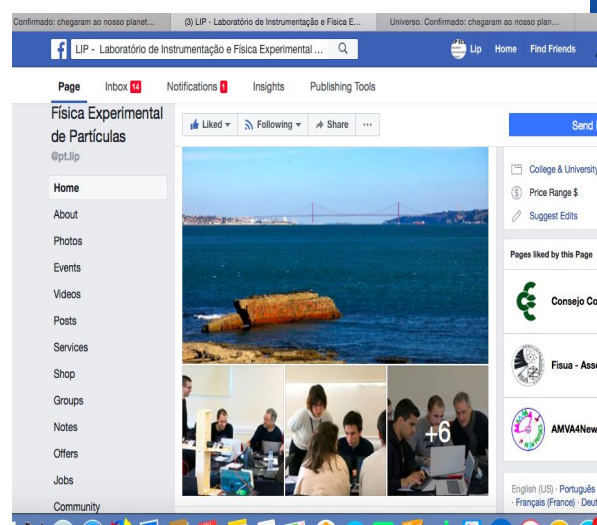
LIP Bulletin



Press communications



Social media



LIP Web

Carlos Manuel, Hugo Gomes

- ✓ Development of the new public website
- ✓ Development of the new intranet
- ✓ Event management system: handling and upgrade
- ✓ Development of a news reader (raspberry Pi)

New intranet ready for tests:

`web.lip.pt/new`

Next, improve existing tools, namely:

- Extend intranet contents
- Groups pages
- Personal pages
- Event management system

LIP Corporate image and Branding

In order to communicate a coherent image of the lab, we are developing a set of graphic rules and branding products

- ✓ Improve the way we present LIP
- ✓ Foster the impact of our communication
- ✓ Make our life easier



Merchandising

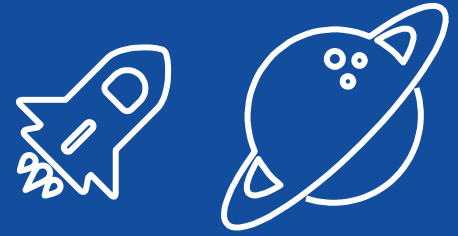


Signage for the new facilities

Now available on the intranet:
logos, templates, image set
(more to come soon)

Many challenges

(first do better, then do more)



- Digital newsletter (cLIP)
- LIP science news: better collaboration with groups / C4
- Materials and contents: physics dossiers, videos, flyers, booklets, merchandising
- A role in project procurement and preparation

... Ideas are welcome & people needed!



Thanks!

FCT

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LABORATÓRIO DE INSTRUMENTAÇÃO
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partículas e tecnologia



ECO-2

[FROM *the* {UN}KNOWN]

[TO *the* PUBLIC]

Pedro Abreu for the LIP-ECO group, Jornadas do LIP, Évora, Feb.2018

Activities LIP-ECO[utreach] 2016-2017

Regular Activities

Around the Exhibition

"Particles: from the Higgs boson to Dark Matter"

- ~3 weeks at Univ.Minho, Braga – 17/2-9/3
- ~3 weeks at Univ.Coimbra – 5-23/4
- ~3 weeks at Univ.Lisboa – 2/5-25/5
LIP 30th anniversary celebrated @ Rectory U.L.
- **+6 Months** @ Planetário de Lisboa,
started on the European Researcher's Night 2016
 > **6 Public Sessions** @ Planetário
 Antimatter/Fernando Barão, Quarks&Gluons/Helena Santos, Neutrinos/Sofia Andringa, Dark Matter/Isabel Lopes, Detectors/Alberto Blanco, Higgs boson/Patrícia Conde-Muñoz
 > Closing **Public Session (extra)** on the 3rd of May
 Particle and Astroparticle physics in the XXIst century/Mário Pimenta

• Masterclasses

- Science in the Summer (Ciência Viva programme; 1 in Coimbra [3 stds], 2 in Lisboa [14 stds])

• CERN Portuguese Language Teachers Programmes

- High-School Students Internship Programme@CERN

• European Researcher's Nights + Dark Matter session

- Outreach seminars at schools (32 B+HS, 3 Primary Sc.)

• +Internationalization (IPPOG, EPPCN, HST)

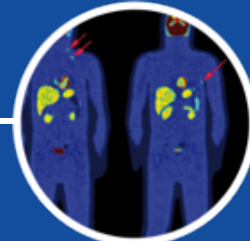
+SPF

Special Public Sessions

- **Arthur McDonald @ The Knowledge Pavillion**
6 September 2016, full house (200+ people)
- **Fabiola Gianotti @ Univ. Évora**
15 September 2017, full house (250+ people)

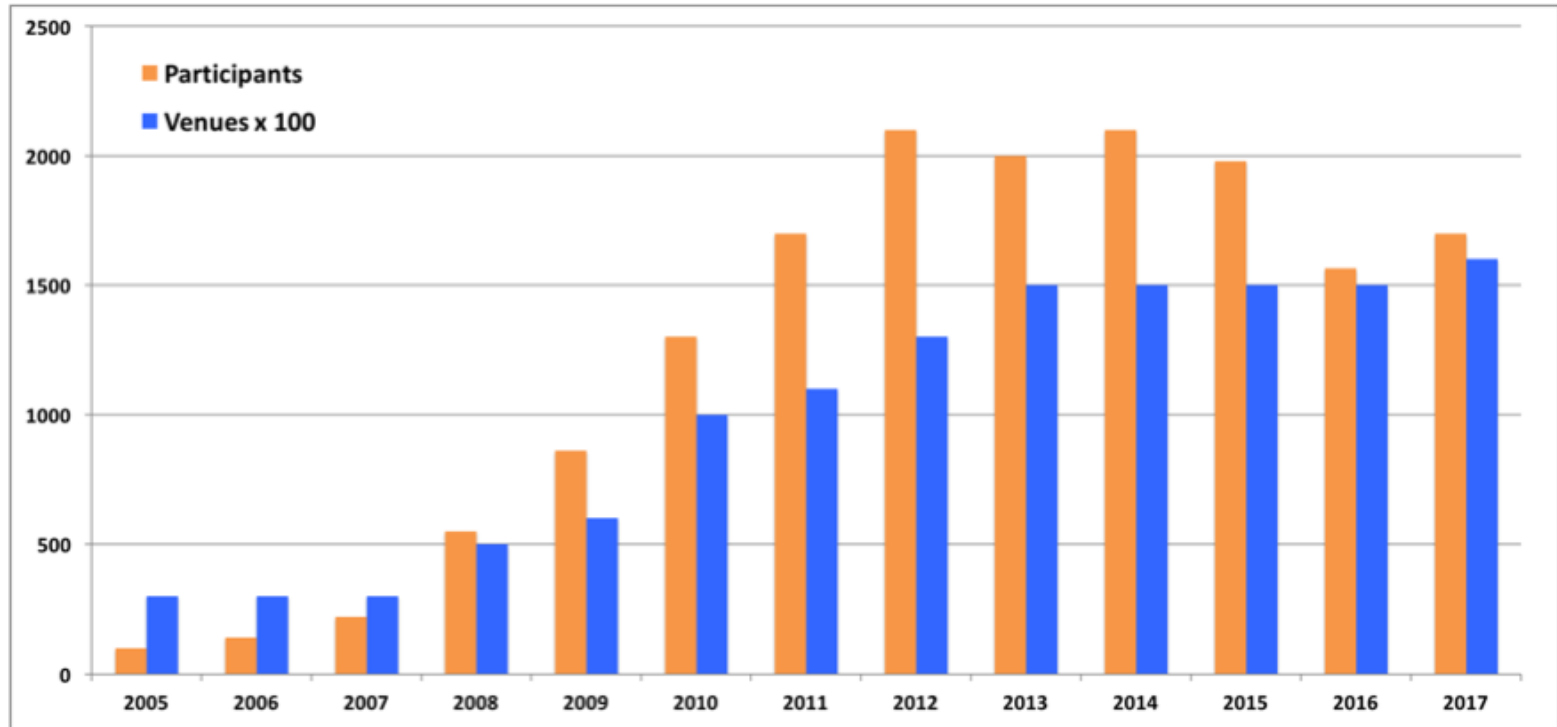
1. Masterclasses

IPPOG's International Masterclasses
in Particle Physics – Hands on CERN



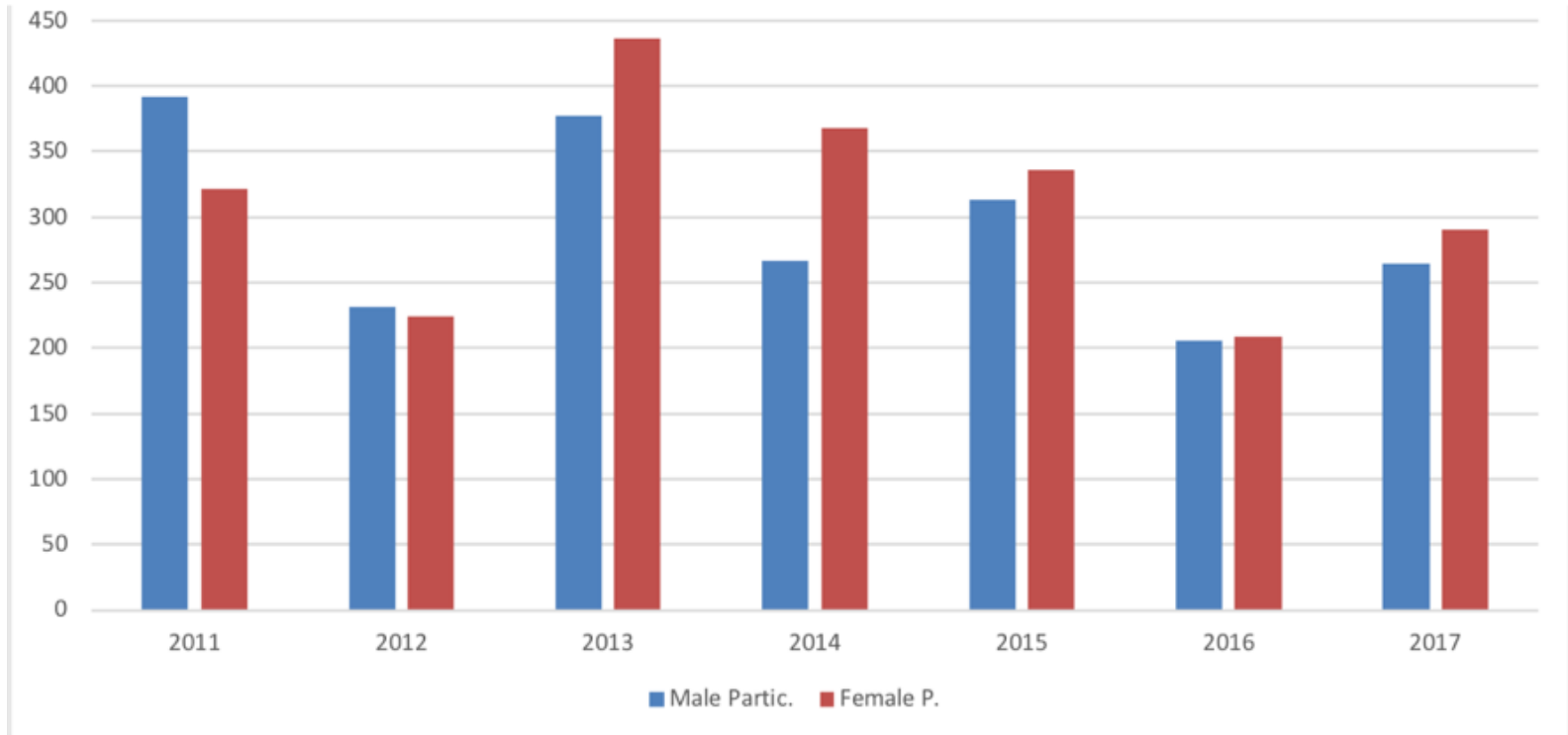
Masterclasses

Fun in a rigorous environment



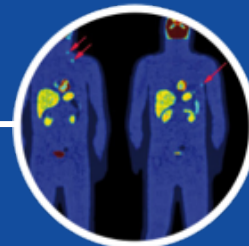
Masterclasses Gender assessment

A 1st trial (participants@IST)



2. CERN PTLTP

CERN's Portuguese Language Teachers Programmes
Escola de Professores no CERN em Língua Portuguesa



10 Years of CERN Teachers Programmes in Portuguese

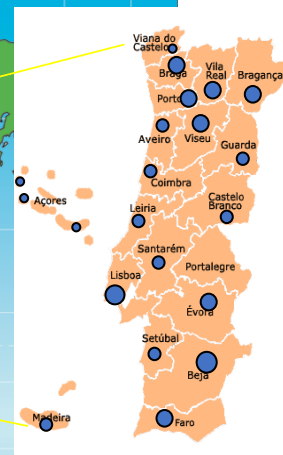
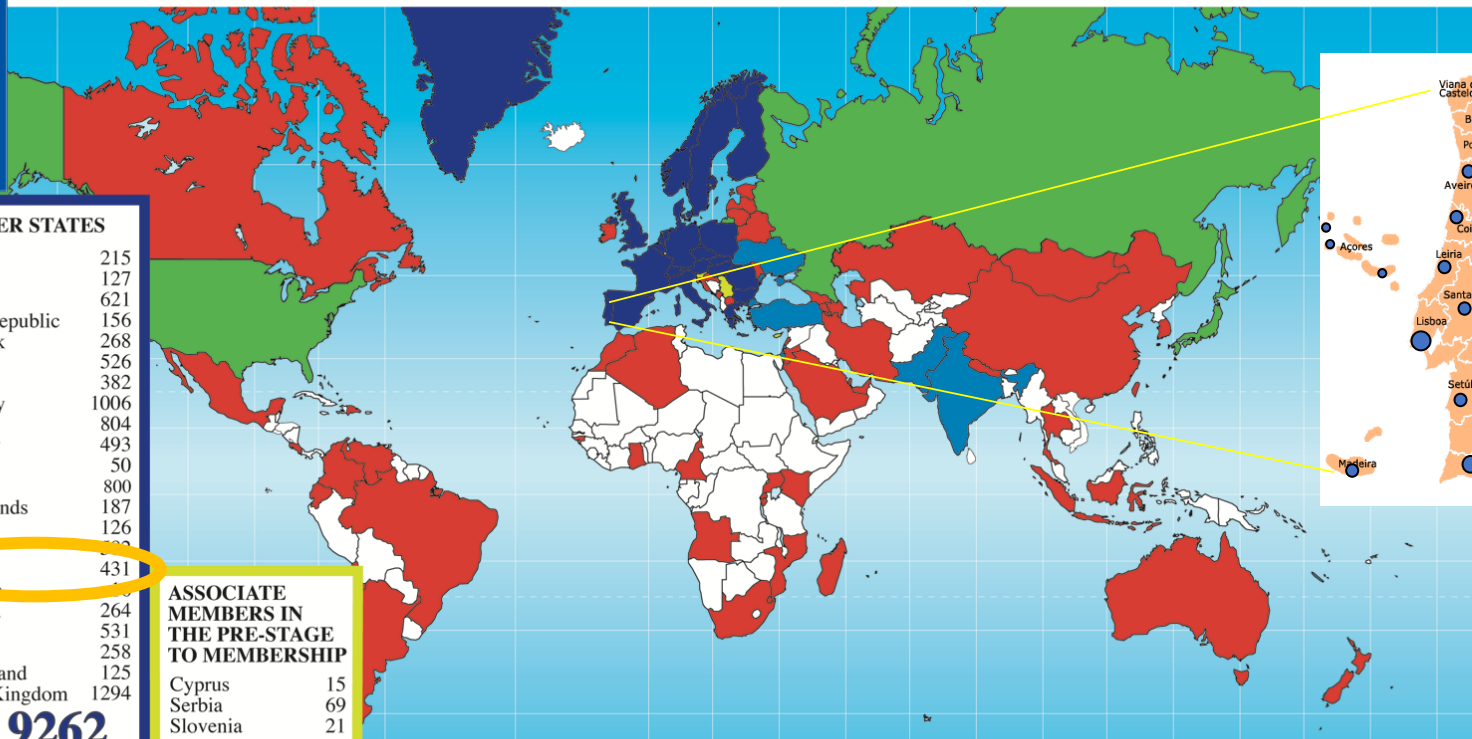
- Teachers spend a week at CERN
- Talks in the morning, visits to Labs+Expts in the afternoon
- 1 afternoon to visit Geneva in groups of ~10 teachers
- 1 "hands-on" workshop to build own cloud-chamber
- International since 2009...
- ...and all in Portuguese Language!



CERN's PTLTP

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
|------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Datas | 10-14/9 | 1-5/9 | 30/8-4/9 | 5-10/9 | 4-9/9 | 26-31/8 | 1-6/9 | 24-29/8 | 30/8-4/9 | 28/8-2/9 | 3-8/9 | |
| Pt.Cand. | 205 | 241 | 191 | 218 | 190 | 250 | 162 | 236 | 187 | 183 | 169 | 2236 |
| Pt. New | 205 | 169 | 78 | 130 | 98 | 165 | 57 | 121 | 96 | 63 | 40 | 1222 |
| Pt. Part. | 43 | 45 | 44 | 45 | 41 | 35 | 34 | 35 | 24 | 22 | 20 | 388 |
| Br. Part. | | 1 | 11 | 20 | 20 | 30 | 31 | 30 | 22 | 20 | 20 | 205 |
| Mz. Par | | | 5 | 4 | 4 | 4 | | 2 | 2 | 1 | | 22 |
| STP Pa | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 7 |
| CV Part. | | | | 1 | 1 | 1 | | 1 | 1 | | | 5 |
| An. Par. | | | | | 4 | | | | | | | 4 |
| TL Part. | | | | | 1 | 3 | 3 | | | | | 7 |
| GB Part | | | | | 1 | | | | | | | 1 |
| Total | 43 | 46 | 60 | 71 | 73 | 74 | 69 | 69 | 50 | 44 | 40 | 639 |

Teacher Programme Participants 1998 - 2017 (Total: 11414)



MEMBER STATES

| | |
|----------------|------|
| Austria | 215 |
| Belgium | 127 |
| Bulgaria | 621 |
| Czech Republic | 156 |
| Denmark | 268 |
| Finland | 526 |
| France | 382 |
| Germany | 1006 |
| Greece | 804 |
| Hungary | 493 |
| Israel | 50 |
| Italy | 800 |
| Netherlands | 187 |
| Norway | 126 |
| Poland | 122 |
| Portugal | 431 |
| Romania | 100 |
| Slovakia | 264 |
| Spain | 531 |
| Sweden | 258 |
| Switzerland | 125 |
| United Kingdom | 1294 |

9262

ASSOCIATE MEMBERS IN THE PRE-STAGE TO MEMBERSHIP

| | |
|----------|----|
| Cyprus | 15 |
| Serbia | 69 |
| Slovenia | 21 |

105

ASSOCIATE MEMBERS

| | |
|----------|-----|
| India | 7 |
| Pakistan | 4 |
| Turkey | 282 |
| Ukraine | 155 |

448

OBSERVERS

| | |
|--------|-----|
| Japan | 10 |
| Russia | 387 |
| USA | 108 |

505

OTHERS

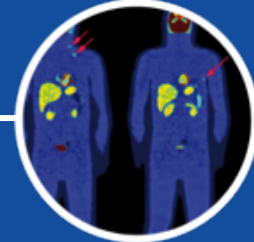
| | | | | | | | | | | | |
|------------|-----|----------------|----|---------------|-----|------------|----|------------------|----|-------------|---|
| Algeria | 1 | Cameroon | 7 | Estonia | 80 | Lebanon | 20 | Nepal | 3 | Taiwan | 1 |
| Angola | 7 | Cape Verde | 4 | Georgia | 138 | Lithuania | 53 | New Zealand | 2 | Tanzania | 1 |
| Argentina | 1 | Chad | 1 | Guinea | 6 | Macedonia | 13 | Palestine (O.T.) | 4 | Timor-Leste | 9 |
| Armenia | 3 | China | 2 | Guinea Bissau | 1 | Madagascar | 2 | Qatar | 1 | Uganda | 2 |
| Australia | 9 | Colombia | 2 | Iran | 9 | Malta | 37 | Rwanda | 1 | U.A.E. | 1 |
| Azerbaijan | 2 | Costa Rica | 4 | Ireland | 9 | Mexico | 64 | Sao Tome | 7 | Venezuela | 1 |
| Bahrain | 2 | Croatia | 53 | Jordan | 12 | Moldova | 4 | Saudi Arabia | 1 | | |
| Belarus | 1 | Dominican Rep. | 72 | Kazakhstan | 13 | Mongolia | 1 | Singapore | 2 | | |
| Brazil | 209 | Ecuador | 2 | Kenya | 4 | Montenegro | 15 | South Africa | 8 | | |
| Canada | 1 | Egypt | 2 | Latvia | 49 | Morocco | 2 | South Korea | 49 | | |
| | | | | | | Mozambique | 22 | Swaziland | 1 | | |

1094

3.

one night/day activities

European Researchers Nights
Dark Matter session...at the National S&T Week



European Researchers Nights (last Friday of Sept.) 2016 and 2017

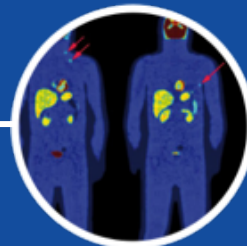
- @Braga, integrated in the celebrations prepared by Escola de Ciências da U.Minho
- @Lisboa, in the Lisbon Planetarium (Virtual Visits to CMS, + “Particle Fever”@2017)

Dark Matter session... celebrated in the national S&T week (Wed., Nov.22nd)

- @LIP-Lisboa, an evening dedicated to Dark Matter research, featuring Ph.D. students
 - **Miguel Orcinha** (Lisboa), **Paulo Brás** (Coimbra), **Tiago Vale** (Braga)
 - DM@AMS (annihilation), DM@LUX (interaction), DM@LHC (production)
 - Full house (more participants than chairs), very positive feedback

4.

Internationalization



IPPOG – International Particle Physics Outreach Group
EPPCN – European Particle Physics Communication Network
HST – High-School Teachers forum (@ CERN)



International Particle Physics Outreach Group

- Turned into a formal Collaboration, with LIP a founding member
- Meets 2x year: Spring outside CERN, Autumn at CERN

Spring 2017 meeting in Lisboa - "at new premises" + **March for Science 22nd April**

EPPCN – European Particle Physics Communication Network

- Meets 2x year: one meeting at CERN, one outside CERN; reports to the CERN Council
- Improves communication of Particle Physics, maximizes exchange of information CERN-Member States

HST – High-School Teachers forum (@CERN)

- New forum started in 2016 at CERN, with a rep./Member State (1 virtual meet., 1 meet.@CERN)
- Focused on education matters, high-school students and teachers, activities for them
- Promotes the **HSSIP** – **H**igh-**S**chool **S**tudents **I**nternship **P**rogramme – for 5 countries in 2017 (PT+...)

5. SPF

Sociedade Portuguesa de Física



NO ENSINO

ESTIMULANDO O ESTUDO

Básico, Secundário, Superior e Pós-graduado

FÍSICA APLICADA
À ENGENHARIA

NA INVESTIGAÇÃO

PREMIANDO OS MAIS JOVENS E
ESTABELECCENDO CONTATOS

*Universidades, Institutos, Centros,
Laboratórios, Empresas,
Unidades de Saúde*

NA SOCIEDADE

DANDO A CONHECER

*Acontecimentos, Sucessos,
Debates, Polémicas, Políticas*

ESTAMOS

• sp física

SOCIEDADE
PORTUGUESA
DE FÍSICA

A **spf** é uma Sociedade Científica criada em Abril de 1974 e é Membro Honorário da Ordem de Instrução Pública.

www.spf.pt



www.facebook.com/spf.pt/

Publicamos regularmente uma newsletter

“a inspirar os jovens, a imaginar o futuro, a preservar a memória”

Vantagens para membros

- Ser parte de uma **Comunidade de Físicos**
- Ter acesso à **Gazeta de Física** e à **EuroPhysics News**
- Estar associado às **Sociedades Internacionais: EPS, IUPAP, EFOMP e IOMP**
- Receber **notícias de congressos e eventos**
- Participar nas **Divisões e Grupos**, na promoção e divulgação da Física em Portugal
- Participar no **Fórum de discussão de tópicos de ensino**
- Ter **desconto em congressos, ações de formação, editoras e eventos culturais**

Um Grande desafio

Em 2018 as Olimpíadas Internacionais de Física IPhO vão realizar-se em Lisboa com organização da SPF

Acompanhe !

<http://ipho2018.pt/>

- Vão decorrer de **21 a 29 de Julho** com a participação de cerca de **1000 participantes** (**600 estudantes, 400 professores + observadores e guias**) de **91 países**
- Evento de grande dimensão e importância para Portugal





*Planting
a future*

Thanks!

to all the people collaborating in all these activities!
...and for your attention!

Any questions?

You can find me at abreu@lip.pt



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