



NATIONAL CENTER FOR PARTICLE, ASTROPARTICLE AND NUCLEAR PHYSICS

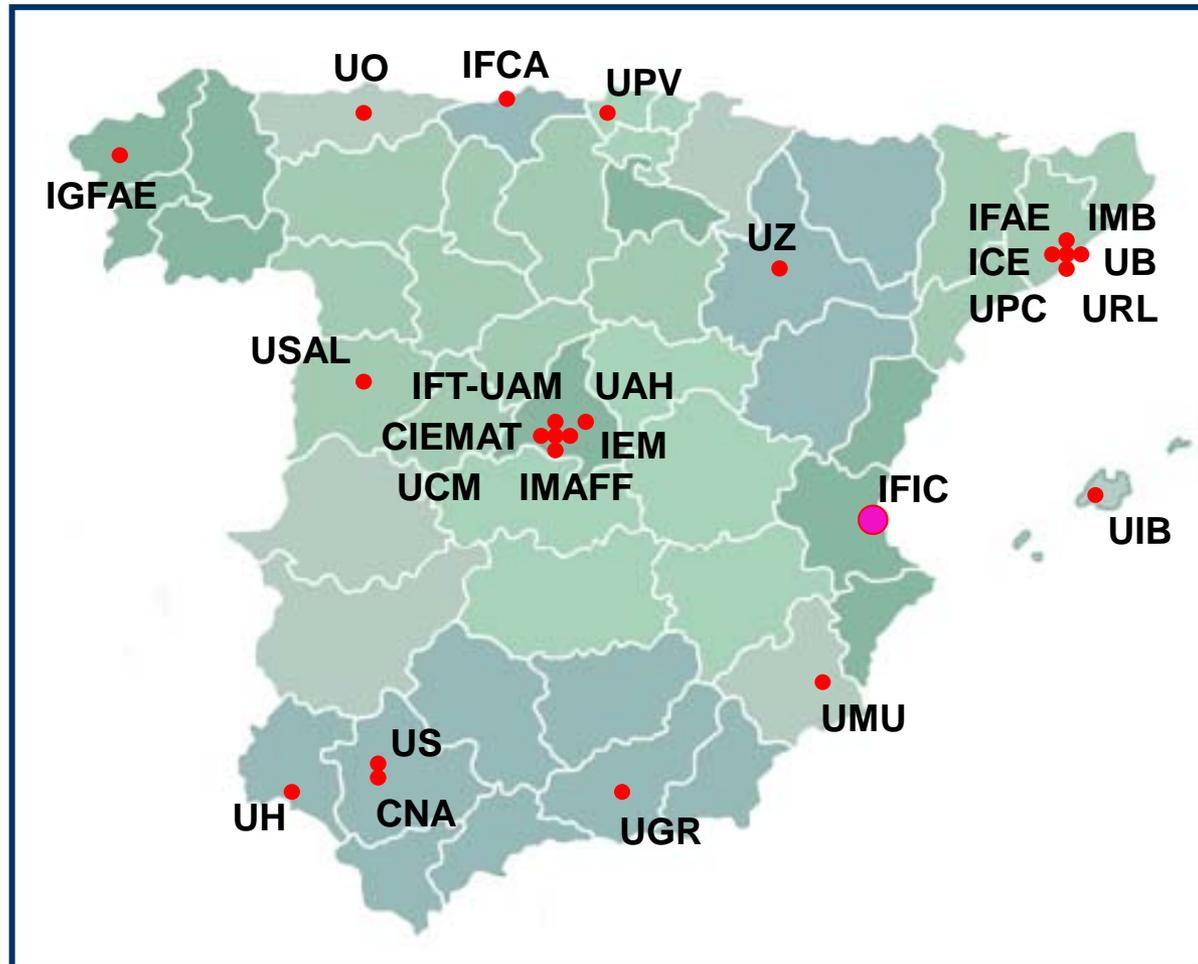


<http://www.i-cpan.es>

Consolider – Ingenio 2010

Project CSD2007-42

2007 – 2014



PARTICIPATING GROUPS (2011)

GROUP	PIs	Drs	% PIs	% Drs
IFIC	19	58	15,57	14,43
CIEMAT	11	44	9,02	10,95
CNA	1	14	0,82	3,48
ICE	1	2	0,82	0,50
IEM	4	12	3,28	2,99
IFAE	9	28	7,38	6,97
IFCA	5	12	4,10	2,99
IFF	7	3	5,74	0,75
IFT	9	17	7,38	4,23
IGFAE	1	29	0,82	7,21
IMB	2	5	1,64	1,24
UAH	1	1	0,82	0,25
UAM	7	10	5,74	2,49
UB	8	32	6,56	7,96
UCM	7	28	5,74	6,97
UGR	8	25	6,56	6,22
UH	2	5	1,64	1,24
UIB	2	12	1,64	2,99
UMU	2	4	1,64	1,00
UO	3	11	2,46	2,74
UPC	1	4	0,82	1,00
UPV	1	7	0,82	1,74
URL	1	1	0,82	0,25
US	3	14	2,46	3,48
USAL	2	6	1,64	1,49
UZ	5	18	4,10	4,48
Total	122	402	100	100

- **Coordinator:** A. Pich (IFIC)
- **Vice-coordinator:** M. Cerrada (CIEMAT)
- **Executive Committee :**
 - **Coordinator, Vice-coordinator**
 - **Exp. Particle Phys.:** J.F. Cuevas (UO), J. Terrón (UAM),
[T. Rodrigo (IFCA), LI. Garrido (UB), C. García (IFIC)]
 - **Theoretical Phys.:** D. Espriu (UB), M. Asorey (UZ)
[L. Ibáñez (IFT), F. del Águila (UGR), M.J. Herrero (IFT)]
 - **Astroparticle Phys.:** J. Cortina (IFAE), I. Gil (CIEMAT)
[M. Martínez (IFAE), E. Zas (IGFAE), J.A. Villar (UZ)]
 - **Nuclear Phys.:** J. Benlliure (IGFAE), B. Rubio (IFIC)
[J. Gómez (US), M.J. García (IEM), J.M. Udías (UCM)]
- **Scientific Strategy Council:** PIs of the 26 Groups
A. Pich (IFIC), M. Cerrada (CIEMAT), M. García (CNA), E. Elizalde (ICE), M.J. García (IEM), M. Quirós (IFAE), A. Ruiz (IFCA), A. González (IFT), J.L. Miramontes (IGFAE), B. Gato (IFF), M. Lozano (IMB), L. del Peral (UAH), J.L. Egido (UAM), LI. Garrido (UB), F. Arqueros (UCM), F. del Águila (UGR), I. Martel (UH), C. Bona (UIB), J.A. Oller (UM), F.J. Cuevas (UO), F. Calviño (UPC), J.L. Mañes (UPV), X. Vilasís (URL), J. Gómez (US), B. Quintana (USAL), J.A. Villar (UZ)

OBJECTIVES

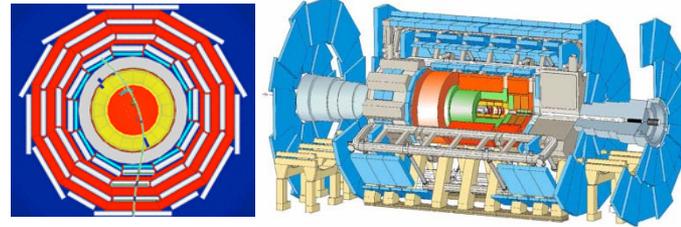
- ❑ **Creation of the National Center for Particle, Astroparticle and Nuclear Physics**
- ❑ Definition of strategies and priority lines. **Coordination** of the Spanish participation in large **international projects**
- ❑ **Representation** of the Spanish physics community
- ❑ **Human resources** (technicians, postdocs, young scientists, ...)
- ❑ Development of common R&D activities
- ❑ **Technology transfer**
- ❑ **Scientific training**
- ❑ **Outreach**

□ Strategic

- SA1: **LHC** Physics
- SA2: Experiments in **Canfranc & Astroparticles**
- SA3: **FAIR** R&D
- SA4: **Future Factories** (ILC, ν F, SuperB, ...)

□ Horizontal

- HA1: R&D and training of personnel in **accelerators**
- HA2: **Data processing** & numerical simulations
- HA3: Advanced **Technology Transfer**
- HA4: **Scientific Training**
- HA5: **Outreach**



FUNDING

☐ CONSOLIDER – INGENIO 2010 :

2007	2008	2009	2010	2011
2 M€				

Received

Total

10.000.000

10.000.000 €

☐ CSIC : 800.000

1.000.000 €

☐ CIEMAT : 600.000

750.000 €

TOTAL : 11.400.000

11.750.000 €

Managing Institution: CSIC (IFIC)

Funded Activities

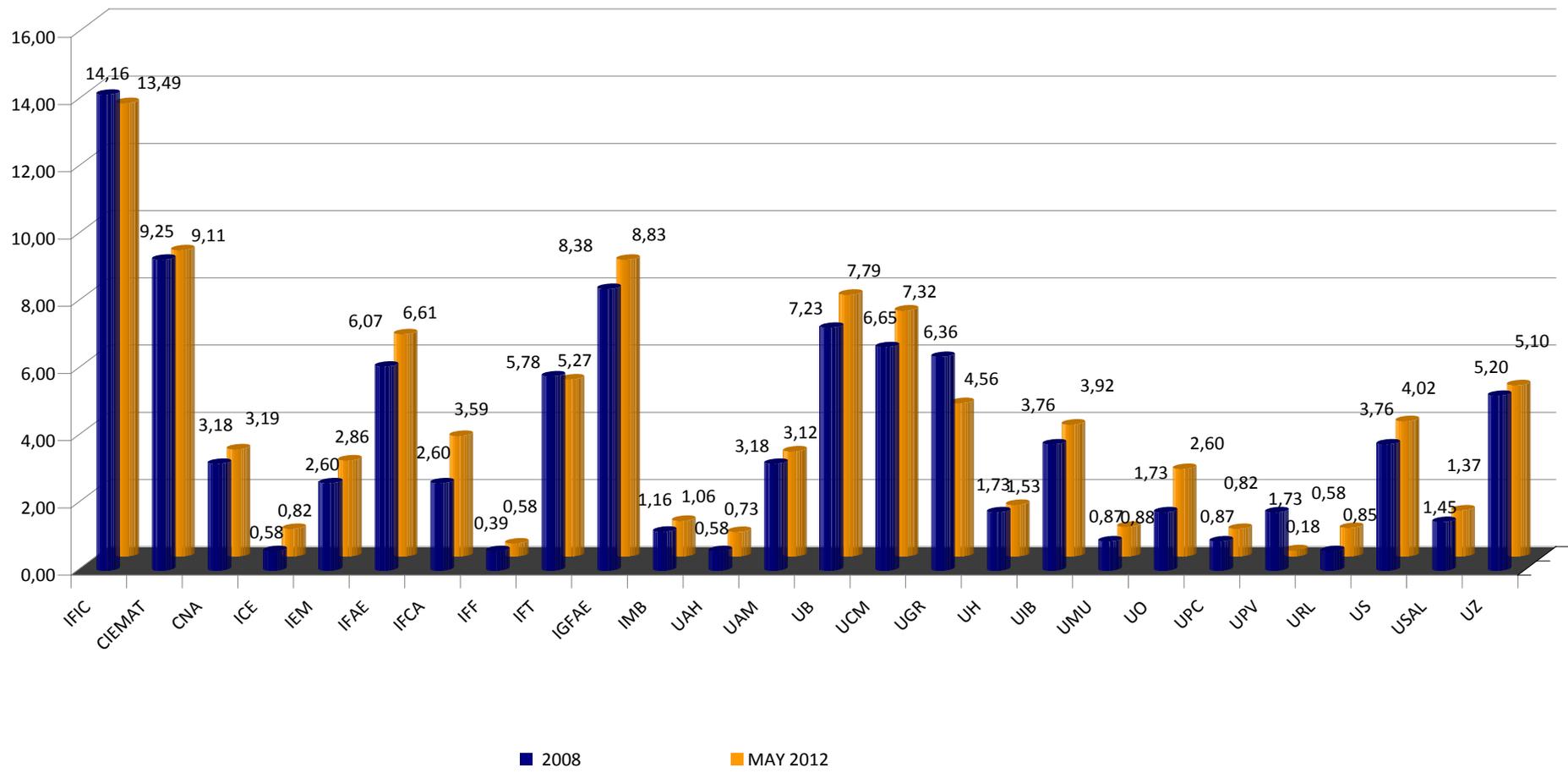
- ❑ **Organization of scientific meetings** 81 (schools, workshops, conferences)
 - **2008:** 5 schools and 6 conferences funded
 - **2009:** 5 schools and 16 conferences funded
 - **2010:** 4 schools and 13 conferences funded
 - **2011:** 6 schools and 17 conferences funded
 - **2012:** 3 schools and 6 conferences funded (May)

- ❑ **Human resources:** 138 contracts already funded (65 active)
 - **2008:** 3 TM, 11 TS and 20 PD 32% foreigners
 - **2009:** 7 TM, 18 TS and 18 PD 28% foreigners
 - **2010:** 4 TM, 14 TS and 27 PD 46% foreigners
 - **2011:** 0 TM, 11 TS, 2 PD and 3 Seniors 29% foreigners

- ❑ **Outreach:** Exhibitions, web, ...

- ❑ **CPAN office:**
 - **2008:** 2 administrative contracts (1/11/2008)
 - **2009:** 1 TIC contract (October 2009 – June 2010)
 - **2010:** 3 (TT, Outreach, TIC) contracts

FUNDING DISTRIBUTION



Menú principal

¿Qué es el CPAN?

Contratados

Documentos

Noticias

Transferencia de Conocimiento

Promoción Tecnológica

Convocatorias CPAN

Otras convocatorias

Eventos

Grupos Participantes

Estructura

Plan de actuación

Cursos para estudiantes

Divulgación

INTRANET

Buscar



Inicio

25/05/2012 La comunidad de Física de Altas Energías prepara su posición conjunta para la futura Estrategia Europea de Física de Partículas



Arranca en Benasque la XL edición del International Meeting on Fundamental Physics, que servirá a la comunidad de Altas Energías española para definir objetivos ante la nueva 'hoja de ruta' de la disciplina. Además, 2012 es un año crucial por la esperada confirmación o descarte de la existencia del bosón de Higgs.

[más información »](#)

25/05/2012 Los Premios de Física de la RSEF y la Fundación BBVA reconocen la investigación en Física de Partículas



La Real Sociedad Española de Física y la Fundación BBVA entregaron ayer los Premios de Física 2011 con la presencia de la Secretaria de Estado de Investigación, Carmen Vela. La Medalla de la RSEF, el máximo galardón, ha recaído en José Bernabéu por su trabajo pionero en física de partículas. El premio a investigador novel en física teórica fue para

Iván Agulló por sus trabajos en cosmología.

[más información »](#)

17/05/2012 La investigadora del IEM-CSIC María José García Borge, directora científica de ISOLDE



Seguir a @CPAN_Ingenio

Noticias

Convocatorias y
Eventos

Divulgación

Transferencia de
Conocimiento y
Promoción
Tecnológica

Información
Institucional

Intranet

17/05/2012 La investigadora del IEM-CSIC María José García Borge, directora científica de ISOLDE



Ha sido escogida por una comisión de expertos integrada por representantes de los 13 países que colaboran en la instalación del CERN, especializada en el estudio de núcleos exóticos. A partir del 1 de julio coordinará los experimentos realizados por más de 450 científicos de la colaboración, en la que participa España desde hace una década.

[más información »](#)

15/05/2012 El CNA pone en marcha un servicio de diagnóstico por imagen mediante un dispositivo PET-CT



El Centro Nacional de Aceleradores, merced a un convenio con el Hospital Universitario Virgen del Rocío de Sevilla, pone a disposición de la comunidad de Medicina Nuclear e Imagen Molecular un servicio de diagnóstico por imagen mediante un tomógrafo PET-CT para ensayos clínicos y proyectos de investigación.

[más información »](#)

09/05/2012 La ciencia afronta el reto de abordar



III CONCURSO DE DIVULGACIÓN CIENTÍFICA CPAN
Proyecto Conciencia-Ingenio 2010 Centro Nacional de Física de Partículas, Astropartículas y Nuclear



CERNLAND

Charlas en IES

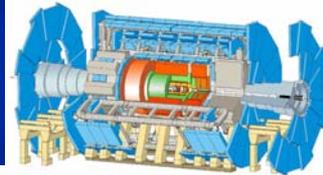
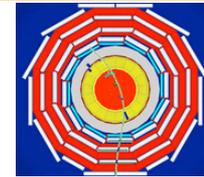


CPAN
CPAN_Ingenio

CPAN_Ingenio Dos investigadores del IFIC (CSIC-UVeG) reciben los premios de la RSEF de telecinco.es/informativos/s... vía @informativost5

about 1 hour ago · reply · retweet · favorite

CPAN_Ingenio La investigación en



- ❑ **Successful LHC start:** All detectors under Spanish responsibility working smoothly. 7 CPAN fellows on site at CERN (commissioning). **LHC-Grid** working
- ❑ **Detector R&D** developments for the **LHC upgrade**, **ILC** and **CLIC**
- ❑ **MAGIC II fully operational.** New sources detected. Important push to **CTA**. 3 new telescopes in **AUGER**. **AMS** successfully launched to the ISS.
- ❑ **Canfranc Underground Laboratory** resumed operation
- ❑ Many **R&D developments for FAIR detectors** (R3B, HISPEC/DESPEC, ELISE, MATS)



☐ Support to National Networks:

- Red Temática de Astropartículas
- Red Temática de Neutrinos
- Red Temática de Física Nuclear <http://www.fnuc.es/>
- Red Temática de Física del LHC <http://www.red-lhc.es/>
- Red Española de Futuros Aceleradores <http://ilces.ific.uv.es/>
- Red Temática de Física de Sabor
- Portal del Grupo de Física Teórica <http://remo.ft.uam.es/TPgroup/>

☐ Outreach Activities:

- CPAN Outreach Group launched

☐ CPAN General Meetings:

- El Escorial, 25 – 27 November 2009
- Valencia, 29 November – 1 December 2010
- Barcelona, 2 – 4 November 2011
- **Cordoba, 26 – 28 November 2012**

☐ Building up the future National Centre

Official Status

- ❑ **Very difficult moment** (economical crisis / political situation)
- ❑ **New law of Science, Technology and Innovation**
General framework just approved; legal regulations still missing
- ❑ **New Funding Agency not yet created**
- ❑ **Agreement with MICINN (2011)**
 - **Extend 2 years the CPAN-Consolider: 9/12/2014**
 - **Redistribute the budget: Personnel increased**

New Economic Distribution

Contracts	8.502.129 €
Infrastructure	20.000 €
Travel expenses	150.000 €
Running costs	1.020.000 €
Indirect Costs	307.871 €
Total	10.000.000 €

Report of CPAN International Advisory Committee (IAC) October 2011

This report is based on presentations at the CPAN Executive Committee/IAC meeting which took place in Madrid on 18th and 19th October 2011.

The IAC understands that significant progress towards a new national organization of the field is delayed given the present financial and political context. The IAC strongly believes that an interruption of CPAN activities after 2012 would imply severe risks of disruptions to the Spanish program. It therefore welcomes the recent decision to extend the mandate of CPAN by two years, 2013 and 2014. The IAC thinks that, in spite of the absence of extra resources, this period should allow CPAN to accomplish its most important missions and bridge the gap until an agreement can be reached on a new organization.

The CPAN investment has provided significant added- value to the Spanish programs. From the presentations heard during the open meeting, the IAC could appreciate the impressive progress achieved through CPAN actions :

- An increased visibility of Spanish experts who have leading international responsibilities in several important experiments and international committees
- A very significant progress in dealing with outreach aspects as exemplified by the creation of a rich web page <http://www.i-cpan.es/index.php?Idioma=es>
- A successful role in organizing several major international meetings and workshops
- A important role in reinforcing collaborations between experimentalists and phenomenologists, largely due to CPAN recruitments of young theorists
- CPAN has significantly alleviated a weakness in the Spanish career structure for qualified technicians & engineers, vital for supporting major experiments and for technology transfer

Many other promising initiatives were taken which, in the near future, should allow the development of Spanish strategies in the fields covered by CPAN. In this respect, the IAC believes that CPAN should become more directly involved in international initiatives. As an example CPAN should prepare for the European Strategy discussion which will take place next year to define European priorities on LHC, future colliders and neutrino facilities. CPAN could then provide valuable advice and support to the Spanish authorities on the CERN strategy. Similarly this advice could also be provided on FAIR.

The IAC strongly believes that CPAN should start organizing an international peer reviewing of its activities. The present very ambitious programs seem certain to face financial cuts requiring difficult choices. This review body would reinforce the role of CPAN and of the National Program in setting priorities to optimize the impact of Spanish investments in the field. We recognize that this initiative requires a consensus between the relevant partners and must be supported by the community. The review body also needs to take into account regional balance in sharing the resources: the committee should include an appropriate combination of international and Spanish members.

In conclusion, we wish to congratulate CPAN for its various fruitful achievements and hope that in the near future significant steps can be taken towards a national organization indispensable to develop an international strategy.

Signatures:

Luis Álvarez-Gaumé, Theory Group, CERN

William Gelletly, Professor Emeritus at University of Surrey

Francois Richard, Directeur de recherche Emeritus au Laboratoire de l'Accélérateur Linéaire d'Orsay

Alan Watson, Professor Emeritus at Leeds University



NATIONAL CENTER FOR PARTICLE, ASTROPARTICLE AND NUCLEAR PHYSICS

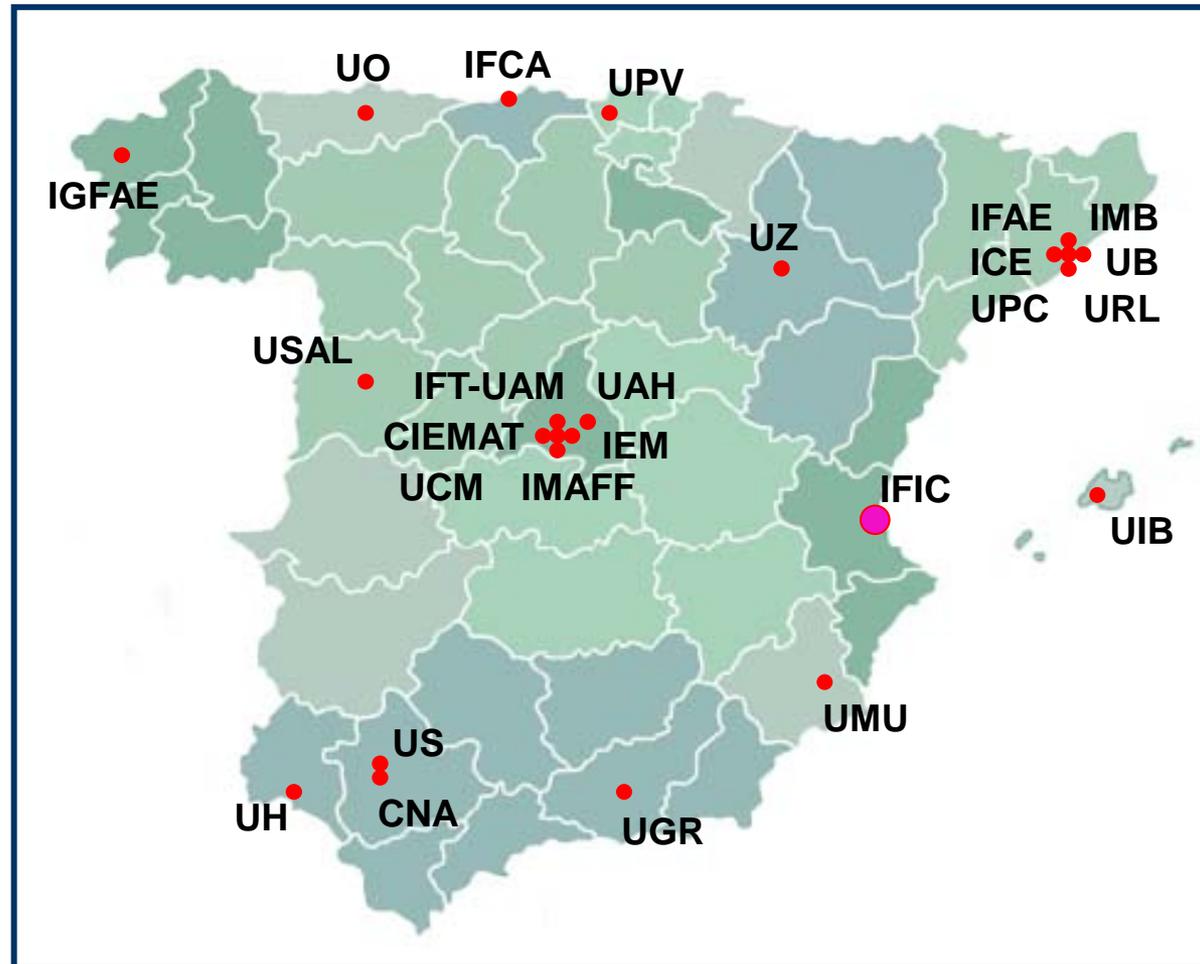


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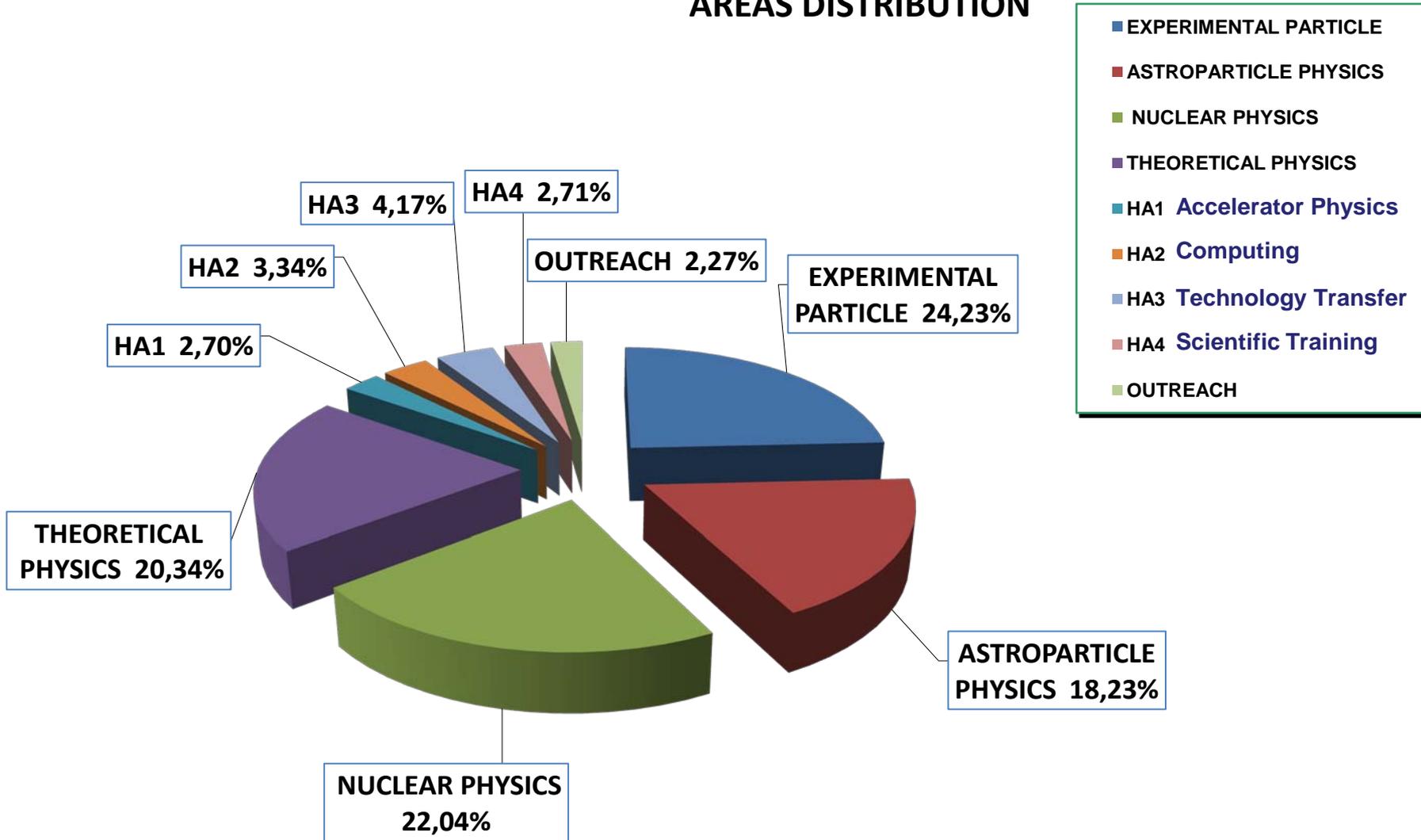
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Project CSD2007-42

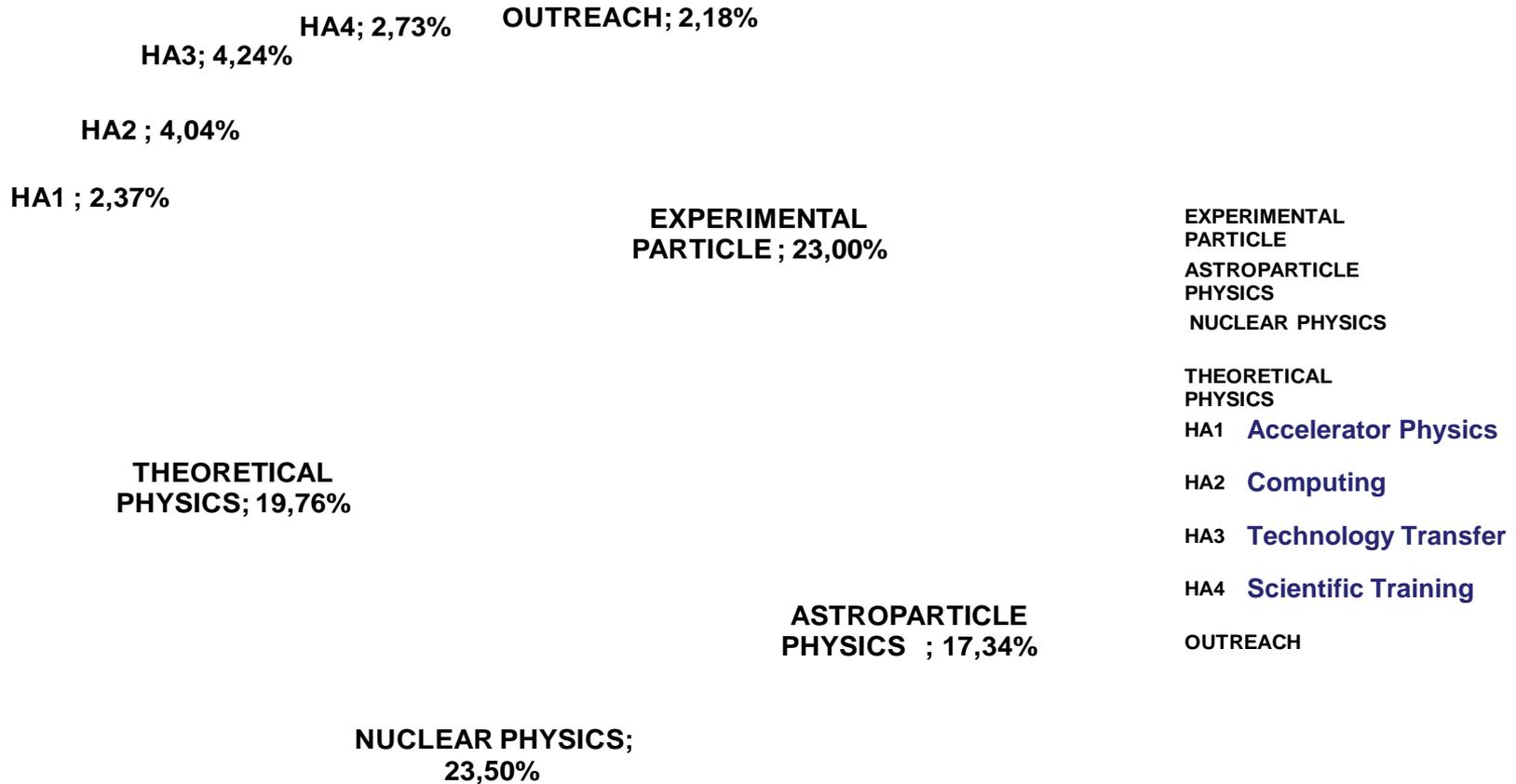
2007 – 2012



AREAS DISTRIBUTION



FUNDING DISTRIBUTION



Initial Schedule

LHC Results



Action Lines

SA1 (LHC)

SA4 (Future Facilities)

SA2 (Astroparticle Physics)

SA3 (Nuclear Physics)

HA1 (Accelerators)

HA2 (Data Processing and Simulation)

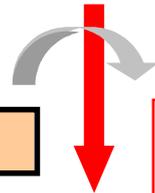
HA3 (Technology Transfer)

HA4 (Scientific Training)

HA5 (Outreach)



Building-up of the Centre



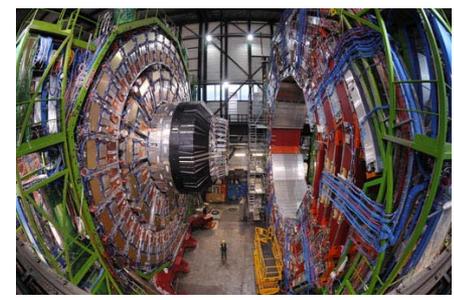
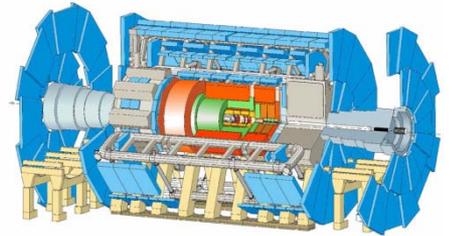
Third Year Evaluation

National Centre Operational

VISIBILITY



ATLAS
Collab. Board



CMS
Collab. Board



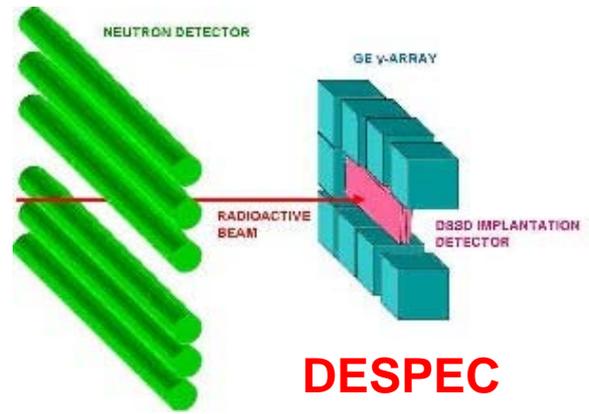
MAGIC



LHCPhenoNet

FlaviA
net

LC / ILC SC



DESPEC



IUPAP Prize



CTA