

# ACTIVITY REPORT 2010

Council Meeting, 1-2 April 2011, Mulhouse (FR)



European Physical Society  
more than ideas



**Maciej Kolwas**, President of the EPS

## INTRODUCTION FROM THE PRESIDENT

The Year 2010 was the last year of first decade of XXI century.

Entering a new decade is the occasion to raise questions concerning the future. Shaping future however needs knowledge and analysis of the past.

In the past 42 years, the EPS has worked to build bridges allowing for information exchange and the strengthening of the European physics community through a well established conference structure, scientific publications, prestigious prizes and a variety of integration activities. EPS credibility derives from its representation (institutional, individual and topical), from its geographical coverage (41 member societies), its implantation in the research community, and what is for me most important - the activities of its members. Now the time has come for the EPS to examine whether its vision and activities correspond to current challenges and Member expectations.

While 2010 was dominated by the need to review and establish a new strategy, the Society and its Divisions and Groups continued to be active in many areas. The richness of EPS 2010 activity is shown in

several following separated parts of this report. Let's now concentrate on works of the EPS governing bodies.

Executive Committee and Secretariat worked hard to modernize its working methods. Starting from last year we began changing how the Executive Committee works - from presidential driven activities to a more governmental system. Therefore in addition to the list of Actions of Executive Committee Members, a distribution of tasks was proposed starting from May 2010. I think that a clear distribution of duties, together with financial and logistical support from the Secretariat has no alternative. The active involvement of the members of the Executive Committee supports the rich and diverse activity of the EPS.

Changes in governing of EPS together with necessary adoption to results of Strategy Working Group stimulated an analysis of structure, division of duties and possibilities of the Secretariat. This delicate work was very carefully conducted by Martina Knoop (Secretary of the Executive Committee), Colin Latimer (EPS Treasurer) and the Secretary

General David Lee - with my participation and (of course) meetings with all members of staff.

Physics Education remains a priority. Following discussions at the Executive Committee, the Physics Education Division was asked to prepare a review of EPS position papers on education. Influencing European policy, exchanging best practice, and improving the quality of science education are just a few of the themes that need to be developed in the revised EPS policy.

It was also my privilege to represent the EPS in various discussions at an international level. My various activities include acting as the Chairman of the Asia Europe Physics Summit which will be organised in Wroclaw, Poland in October 2011, discussions at the ICTP in Trieste on the occasion of its 45<sup>th</sup> anniversary, as well as the organisation of an Executive Committee meeting at the Donostia International Physics Centre in San Sebastian, Spain.

I close by thanking all members of Mulhouse office with Secretary General David Lee for understanding of new reality and positive, proactive response.

Thank you very much for the activity, from volunteers and staff, enriching our common Society and showing great value of common effort.

*Maciej Kolwas*

Lecture room - ExCom in San Sebastian



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# EPS STRATEGY 2010+

At the Council 2009 the Executive Committee began reviewing EPS strategy. Throughout 2009, the Executive Committee reviewed thematic priorities. These were presented at the meeting of the Presidents of IoP, DPG, SIF and the SFP in January 2010, where it was suggested a broad consultation of all EPS members. Therefore the EPS Executive Committee prepared and presented a Strategy Consultation document. Independently, the IoP and DPG drafted a Joint Statement.

The guiding principles for the EPS vision was strengthening and modernizing its activity profile, providing added value for all categories of members and their activities, and representing the physics community at the European and World wide level, while maintaining the character of a Learned Society.

The EPS Council 2010 considered the strategy of the EPS and adopted the proposal to create a working group to review EPS activities, mission and strategy. The Strategy Working Group during four intense meetings and through multiple exchanges of messages and documents in between analyzed the European Physical Society in depth.

The Strategy Working Group focused its discussions on certain key themes. These included: Key role of EPS; Organization

and governance of EPS; Membership; Core activities; Communication of EPS inside Society and outside; and the interaction of EPS and European Policy Makers. Simultaneously, a broad consultation was carried out: personally I participated in board meetings of High Energy Particle Physics in CERN, Condensed Matter Division in Warsaw, Nuclear Physics Division in Warsaw, Austrian Physical Society board. The extensive exchanges with the some of the larger physical societies (IoP, DPG, SFP, SIF) were very useful and they led to a true common position and understanding. Input was also received from EPS Divisions and Groups.

I should remark that well prepared meetings (thanks mainly to Luisa Cifarelli) and the determination of the SWG members to improve the EPS led to a successful conclusions summarized and accepted by Exceptional Council meeting in Amsterdam on 20 November 2010.

The strategy consultation highlighted a two-fold mission for the EPS, as a Learned Society, and as a Federation. A part of the fundamental mission of the EPS has not changed and this includes:

- to pilot activities that would have additional impact if done so on a European/International scale;

- to promote activities that would be enhanced if done so through collaboration with other learned societies;
- to assist its members societies in broadening the impact of their national activities;
- to support a community of individual physicists that possibly amplifies their career development;
- to provide the opportunity and means for individual physicists to be actively involved in EPS activities;
- to support research institutes through networks for the exchange of best practice, communication and access to individual physicists;
- to monitor, communicate and provide input on Science information and Science policy.

In addition, the EPS as a federative body of Member Societies and Associate Members (AMs), must act as an international representative for its members for policy statements, influence and advice, objective reports and reference papers, etc.;

The consequences of this formulation of EPS mission will have important consequences for the Society, and will lead to new methods of governing, distribution of tasks and resources, and establishing priorities. This dual mission should enrich activity, by opening new possibilities as well as due to synergy of methods and possibilities. For the physicist in us, enrichment through entanglement.

## Executive Committee Activities

Executive Committee members were attributed responsibility to oversee specific projects and programmes of the EPS, and to make regular reports and recommendations. They were also given responsibility to review specific activities. The reviews are ongoing and will be discussed in 2011. The following table shows the distribution. (Table 1)

In addition to the meeting in March to prepare Council, the Executive Committee met 3 times, twice in Mulhouse (in May 2010 and January 2011) and once in San Sebastian, Spain (in October 2010).

▼ Table 1:  
Executive  
Committee -  
Distribution  
of tasks

Executive Committee Member	Activity	Review
M. Knoop	Conférence Exceptionnelle	EPS Secretariat Grant's scheme
C. Latimer	Finances	
C. Biscari	Member Services	Divisions and Groups activities and services
E. de Wolf	European Integration	
H. Ferdinande, E. de Wolf	Education activities	
H. Ferdinande	European Education Platform Bologna Process	
L. Cifarelli	Alliance for Physics Publishing Energy	
L. Cifarelli, M. Kolwas	General Conference	
M. Kolwas	Young Minds ASEPS/Chinese Physical Society Forum Physics and Society	
C. Biscari, F. Wagner	Large Facilities Technology Network	
A. Proykova	Gender Equality Student Liaison	
A. Kastberg		Physnet

A regular feature of the Executive Committee meetings is an Open Session, where representatives from Divisions and Groups, Committees, other Learned Societies etc... are invited to discuss common or complementary activities.

In 2010, the Executive Committee invited A Slaoui, immediate past president of European Materials Research Society - EMRS; Martial Ducloy, president of French Physical Society – SFP; Christophe Rosset, president of Swiss Physical Society – SPS; and main convener for the 2010 Forum Physics and Society and Neil Williams from the European Science Foundation. At the October Executive Committee meeting hosted at Donostia International Physics Center, presentations were made by the director, Pedro Miguel Echenique Landiribar, and discussions held with Carlos Hidalgo, chair of the Plasma Physics Division, and Jan Mostowski, new editor in chief of the European Journal of Physics and, Michael Schreiber, the Editor in Chief of EPL.

## Education

The EPS Study of the Implementation of the Bologna Project entered into its final stages in 2010, with a study of the Physics Doctoral level. Two meetings of the 24 partners in the project were held, to discuss the final reports for the Physics Bachelor and Physics Master level reports and to prepare the questionnaire for the Doctoral Level Report. These reports are available at [www.eps.org/activities/education/eps-physics-education-studies](http://www.eps.org/activities/education/eps-physics-education-studies). At the last meeting in December 2010, the preliminary report on the Doctoral level was discussed. The studies at the Physics Bachelor level and at the Physics Master level led to the preparation of two documents which were published by the EPS in 2010: A European specification for Physics Bachelor Studies, and A European specification for Physics Master Studies. Each of these documents is a primary external source for higher education institutions when developing new programs, providing guidance for learning outcomes for these new programs. These documents were prepared for the EPS by H. Ferdinande, with input from experts from around Europe and can

be found at: [www.eps.org/activities/education/eps-physics-education-studies](http://www.eps.org/activities/education/eps-physics-education-studies).

The EPS Education Division has undertaken the task of updating the EPS position papers on Education. A first draft was presented to the Executive Committee. To be complete, the EPS position needs to address educational policy development in a European context and in light of the European Research Area, the European Higher Education Area, the Bologna Reforms, and EC research policy. This is a task which will be completed in 2011.

## Communication

The Executive Committee recognised the importance of improved communications about the EPS and its activities and has begun a renovation of the main EPS website. The purpose is to make the website more lively, and improve navigation, attracting new users looking for information about the EPS and physics in Europe. The EPS Secretariat has begun working on a new proposal and the new site should be on-line in the second semester of 2011.

New tools have been implemented for on-line collaboration. MyPhys allows for documents, images, calendars, etc... to be shared easily, with centralised storage. It is used for EPS Executive Committee meetings, and has been used for the Exceptional Council meeting in November 2010 as well as the Council meeting in 2011.

M. Knoop, the Honorary Secretary of the Executive Committee continues to prepare publishable summaries of the Executive Committee meetings. These summaries are sent to Member Societies, and are available on-line for EPS Members.

## International Relations

### ASEPS

ASEPS 2011 is jointly organised by the EPS and the AAPPS. The French, Polish and German physical societies also participate in the organisation as well as Wrocław Science Centre, EIT+ the physical societies from ASEPS 2011 will cover three main issues: grand challenges in physics; trends in physics & science policy issues; and large scale projects & research infrastructures. The goal is to discuss how the scientific potential in Europe and Asia can

build common science & technology and educational initiatives. Achievements in physics will be used to highlight excellence through cooperation, promotion of individual excellence, and developing collective excellence through joint research infrastructure. ASEPS 2011 is under the patronage of: the Mayor of Wrocław, the Polish Minister of Science and Higher Education, and the Polish Presidency of the European Union. [www.aseps.net](http://www.aseps.net).

### COSMOS

The EPS was a partner in the COSMOS project, which ended in 2010. The main purpose of the COSMOS project was to create an experimental laboratory for students and teachers in order to improve science instruction by expanding the resources for teaching and learning in schools and universities and by providing more challenging and authentic learning experiences for students. The project built upon the state of the art developments as regards the interoperability architectures and metadata standards and the latest evolutions in learning technologies to perform an extended validation on the effectiveness and the efficiency of the proposed approach in the science teaching and learning. [www.ea.gr/ep/cosmos](http://www.ea.gr/ep/cosmos).

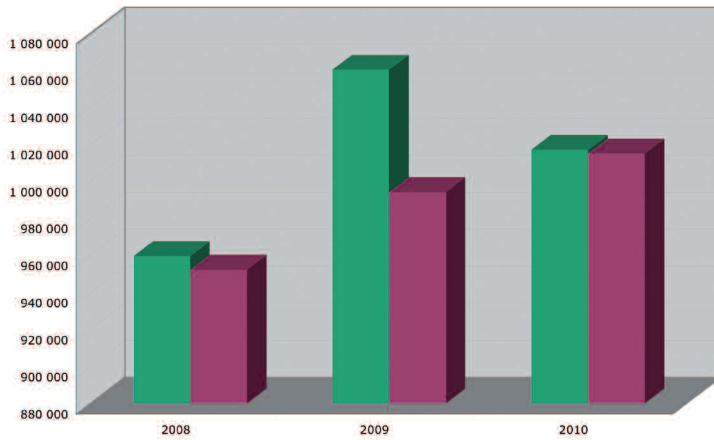
### Learning with ATLAS @ CERN

The EPS is a partner in this project. This project proposes an experimental laboratory for students, teachers and science museum visitors. The aim is to improve science instruction by expanding the resources for teaching and learning in schools, universities and science centers & museums, providing more challenging and authentic learning experiences. [www.learningwithatlas-portal.eu](http://www.learningwithatlas-portal.eu).

### PATHWAY

The EPS is a partner in the PATHWAY project, involved in dissemination. This project has just started and will run for 3 years. The co-ordinator is the Didactics Department at the University of Bayreuth (DE). The project has 25 partners from Europe, Russia and the USA. The PATHWAY project proposes to develop a standard based model enquiry based science teaching.

## EPS INCOME AND EXPENDITURES



## FINANCES

The figures pertain to estimates, subject to change after auditing

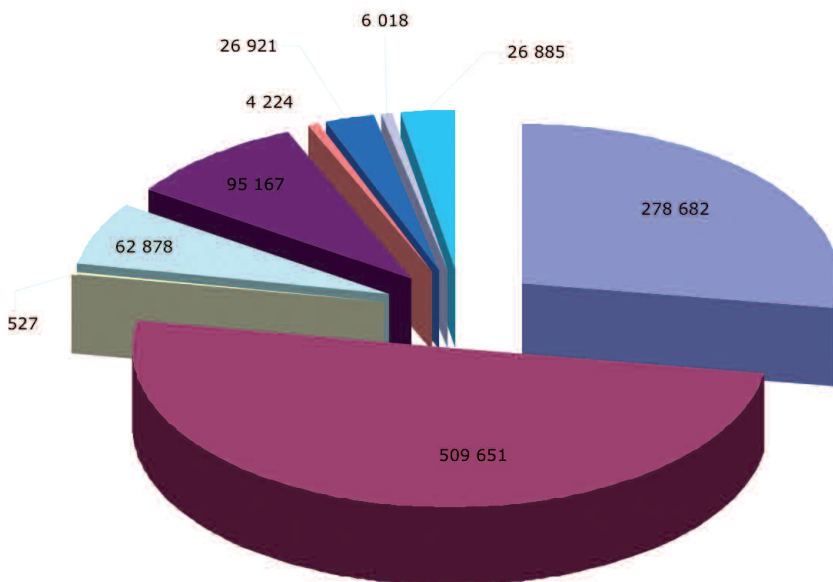
Total expenditure is estimated at: Euro 1 014 953.

Total income for the year is estimated at: Euro 1 016 898.

The outcome for the year is estimated at a slight excess of Euro 1 945.

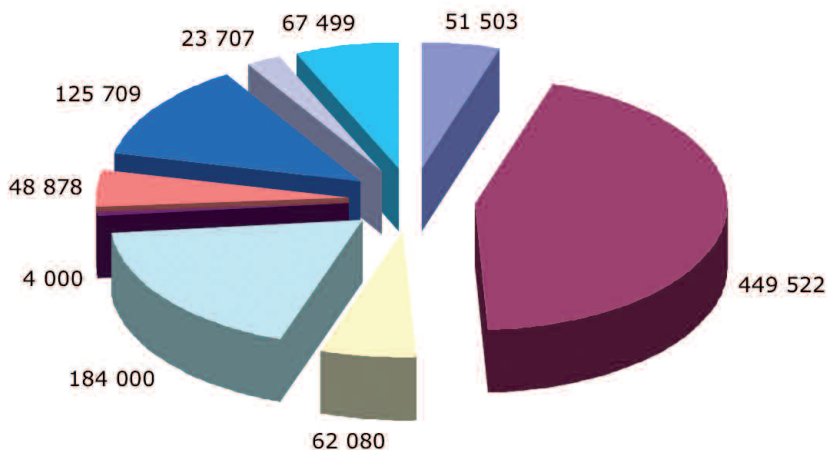
Income  
Expenditure

## COMPOSITION OF EXPENDITURE



Total Administrative Expenditure  
Scientific Issues in Physics  
Physics in Profession  
Grants  
Physics Education  
European Integration  
Public Awareness  
Allocations Executive Committee/Council  
Amortizations

## COMPOSITION OF INCOME



Individual Members  
Member Societies  
Associate Members  
EPL Contract  
EPL Excess  
European Journal of Physics  
Conference Services  
Other (Address labels, other publications, etc...)  
Income from other sources (EU, grants,...)



# SECRETARIAT

There are 12 permanent staff members at the Secretariat. Of this staff, 1 is paid by the Université d'Haute Alsace, and 5.5 are working for and are paid through income from conference and editorial services. Effectively core staff working for Executive Committee, MS, Committees and Divisions and web page consists of 5 persons plus the Secretary General. There are also 2 temporary staff members, one working in the Conference Services Department hired to handle the increased workload in 2011, and 1 secretarial student who assists in various tasks in the office.

The Secretariat provides institutional history, member management, secretarial, financial and IT services and logistical support for EPS activities.

**Creation and hosting of websites** is offered to all EPS D/G. The following additional services are also available: graphic design, content management systems (Zope, Plone), web tools (wiki, forms, forum, etc...) and a help line. The websites are currently hosted by the EPS for 5 Divisions (AMPD, CMD, PED, QEOD, SNPD) and 3 groups (EPCS, HoP, and

PDG). In addition, The Forum Physics and Society and Action Committee on Conferences also have websites at EPS. Among the new services implemented in 2010 include on line forms for voting and for grant applications. A shared workspace (MyPhys) was also developed.

The Executive Committee strongly supports the renovation of communication methods at EPS. A proposal to modify www.eps.org is underway, in order to increase visibility of EPS and facilitate navigation and search on the website. A shared internal internet working-space has been tested by the Executive Committee and will be used by all Executive Committee members for the distribution of documents, reports, etc. It will be expanded to Council in the coming months. The organisation and working methods of the Secretariat are regularly monitored by M Knoop (Honorary Secretary of the Executive Committee) and C Latimer (Honorary Treasurer). The purpose is to make proposals that will improve the efficiency of the Secretariat. Among the proposals adopted in 2010 are annual staff

evaluations, and the internal appointment of a Deputy to the Secretary General. The hiring of a half time student assistant allows the EPS to provide on the job training, as well as obtain additional help in a cost effective manner. The recruitment of a scientific communication officer will be necessary to improve the communications capacity of the EPS.

**Conference services** for EPS D/G are also available. All or part of the organisation can be handled by the EPS, including registration and payment, online submission and scoring and preparation of abstract book. In 2010, EPS Conference Services organised:

- 3<sup>rd</sup> Europhoton Solid State and Fiber Coherent Light Sources, 29 August – 3 September 2010, Hamburg, Germany

- Nanometa 2011, Seefeld in Tirol, Austria, 5 - 8 January 2009, 270 participants

The Secretariat provides **Editorial Services for EPL**. In 2010, a total of 1971 submissions were received. The median time from submission to decision was 75 days. EPL published 861 papers in 2010 and 4712 pages.

# EPS COMMITTEES

Committees are established by the Executive Committee to implement specific aspects of EPS strategy. Committees are responsible for implementing programmes and projects of the EPS.

## Conference Committee

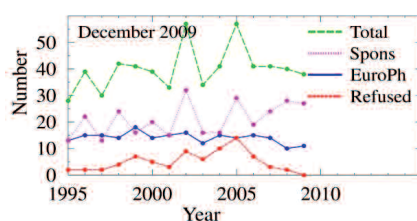
**Chairman: Olaf Scholten**

The conference committee is responsible for the collecting and disseminating information on EPS Europhysics Conferences (i.e. conferences organized by EPS D/G), and for evaluating applications to obtain the label of EPS Sponsored Conference. It is also responsible for the distribution of grants for conferences.

In the figure the number of Europhysics and Sponsored conferences and schools are given as well as the number of rejected applications since 1995. The number of Sponsored conferences is slowly increasing.

### 1. Conferences Grants

The EPS makes grants available to conference organizers to allow for the



participation of young scientists in their meeting who otherwise would not be able to attend. The Executive Committee has decided to limit the distribution of conference grants to Europhysics conferences.

### 2. Invited Speaker Grants

The EPS makes grants available to Europhysics conferences for inviting distinguished speakers. The rules for receiving a grant for invited speakers has been made simpler and the grant has changed to 500 Euro.

#### ◀ Conferences & Schools:

Europhysics, Sponsored, or Rejected since 1995, listed according to the year when the event took place (status as of year end 2010).

### 3. EPS Poster Prize Grants

Are available to EPS Europhysics conferences for a poster prize, to make an award to a student who has presented the best poster at the conference. The grant amount has been changed to 250 Euro per conference.

### 4. IM Travel Grant

A new grant system has been put in effect where individual members can apply for travel a travel grant of 350 Euro.

#### Other ACC-Board related activities

- A newsletter was sent to the board members principally to report on the renewed grant systems that have been placed in effect.
- Much progress has been made in developing a web-site for administrating conferences. However it is not yet at a stage that the site can be opened up for public usage.

### Gender Equality in Physics

**Chairman: Ana Proykova**

The Gender Equality in Physics Committee was established following the first IUPAP Women in Physics Conference. It informs and advises the Executive Committee on issues relating to women in physics.

The EPS has been a member of the European Platform of Women Scientists ([www.epws.org](http://www.epws.org)), funded as a project by the European Commission 2005-2009. Three physicists (Claudine Hermann, Ana Proykova and Gillian Gehring) were on the founding board of 12 and physics was very well represented. The project life of the Platform is over. Now it is a self-supporting network.

#### Women in Physics Working Group

Prof. Claudine Hermann (vice-president of the European Platform of Women Scientists) and Dr. Ann Marks were nominated by Ana Proykova for a grant from the EPS to attend the EPWS General Assembly and Conference 2010 Women in Present and Future European

Research Royal Belgian Museum of Natural Sciences, Rue Vautier 29, B-1000 Brussels, 10-11 June 2010.

Ms. Hermann and Ms. Marks acknowledged the support from the EPS in the article published in the EPN after the conference (EPN 41/6, p. 9)

### The Mobility Committee

**Chairman: Stig Steenstrup**

Established in 1984, the Mobility Committee was created to administer the European Scheme for Physics Students (EMSPS). The Mobility Committee is responsible for the award of EPS University Student Fellowships.

The Mobility Committee has made efforts to maintain the list of universities in the European Mobility Scheme for Physics Students, which is currently hosted at <http://emspd.epsddivisions.org>. All of the coordinators of the network were contacted, and about 20% have updated their information.

The Mobility Committee was established to administer student grants within the European Mobility Scheme for Physics Students. The EMSPS has been replaced in recent years with EC programmes, bi-lateral agreements, and the Bologna reforms. University Student Fellowships are no longer limited to EMSPS institutions, and the selection committee is composed of members of the Grants Committee. Therefore, it was decided to dissolve the Mobility Committee. The Executive Committee would like to express its thanks to the members of the Mobility Committee and its hard work and dedication over the years.

### Grants Committee

**Chairman: Olaf Scholten**

This committee was created in 2007 to make the EPS grants systems more dynamic and better serve their purpose of increasing the visibility of the EPS. To this end the committee critically reviewed the existing granting schemes early in 2011 and a series of new grants has

been designed for implementation in 2011. In some cases the new grants resemble the old ones while others are new initiatives. A set of criteria has been defined to judge if a particular grant fulfils its objective. Among the objectives of EPS grants are: bringing publicity to the EPS and promoting the policy goals of the EPS in a cost efficient manner.

#### Overview Grant Schemes 2010

The table below shows the amounts spent by the EPS on the Grant schemes in 2010.

2010	Spending
EPS Student Fellowships	0 €
Pre University IPC	11,330 €
Special Regional Projects	4,500 €
Conferences Grants	28,671 €
Invited Speaker Grants	4,000 €
EPS Poster Prize	2,500 €
<b>Total</b>	<b>51,001 €</b>

#### Grant Schemes 2011

In the following a short overview of each of the new granting schemes is presented. In some cases the rules resemble those of old schemes.

##### University Student Fellowships

The aim of this granting scheme is to increase visibility of the EPS among master students by distributing prestigious grants that allow students to do part of their study in another European country. This also supports the EPS policy of increasing mutual cooperation between different EU countries. In the past years there was very little activity in this field and over the past year no funding was distributed. The rules for this granting scheme were therefore thoroughly revised. Under the new rules maximally 3 fellowships will be awarded annually to Master students (second cycle, post Bachelor, pre-PhD) towards the expenses of studying in another country for a period of at least 3 months. The students have to write a research proposal and the grants are rewarded to the three best.

### **Grants for Pre-university International Physics Competitions**

The EPS will provide grants to organizers of international physics competitions (Olympiads, tournaments and another international contests or other international events) promoting physics based on work of school students. Not more than 4 grants will be available per year for sponsoring prizes, one for the best student and one for the most inspiring teacher.

### **Special Regional Projects**

These grants are geared towards regional meetings of EPS Member Societies involving at least three different countries. The goal is to promote regional cooperation in physics.

### **Conferences Grants**

The EPS makes grants available to the organizers of Europhysics conferences to allow for the participation of young scientists in their meeting.

### **IM Travel Grants**

The EPS makes grants available to individual members of the EPS to allow for the participation in a EPS recognized (Europhysics or Sponsored) meeting.

### **Invited Speaker Grants**

The EPS makes grants available to conferences organized by EPS Divisions and Groups (Europhysics conferences and schools) to cover costs of invited speakers.

### **EPS Poster Prize**

Grants are available to EPS Europhysics and Sponsored conferences for a poster prize, to make an award to a student who has presented the best poster at the conference.

## **Committee on European Integration (CEI)**

**Chairman: Jaroslav Nadrchal**

The CEI was created in 2008 to advise the Executive Committee on the situation of physics in countries on the periphery of

the EU. While the CEI has permanent members, other individuals are regularly contacted in all interested countries for their advice and input.

In 2010, the CEI initiated a report on the physics situation in Eastern Europe through contacts with physics and physicists' societies in the countries of Eastern Europe including those who are not members of EPS. While not answers were received, a report was written.

Problems identified include lack of money, both for the Society, and for scientific research. Low salaries for teachers is another aspect of this. The decreasing number of teaching hours of physics in secondary schools and technical universities will also have a negative impact on physics.

The EPS needs to continue to support the Member Societies in Eastern Europe, with specific activities and grants. Outreach activities, such as the WYP2005 were very good for these Societies. Wherever possible, the EPS should pilot such activities. Position papers from the EPS are helpful for these societies in involving them in policy discussions locally. The EPS activities in education, and support of physics are very important.

Physicists from Eastern Europe are interested in participating actively in EPS Divisions and Groups, as well as the interaction with the corresponding Divisions and Groups in these countries. A similar report was prepared with help of IGPD about situation in physics and community of physicists in the countries of Africa.

The full report can be found at: [www.eps.org/news/Report%20CEI%20Eastern%20Europe%202010.pdf](http://www.eps.org/news/Report%20CEI%20Eastern%20Europe%202010.pdf)

Major activities of the CEI in 2011 will be to support for the 9<sup>th</sup> international competition EUSO (European Union Science Olympiad) that will be held in the Czech Republic in 2011, as well as the IPSEC meeting that will be organized in Lublin (Poland) at the opportunity of the meeting of Polish physicists in September 2011. Members of CEI will be invited.

## **Forum Physics and Society**

**Chairman: Martial Ducloy**

The Forum Physics and Society (FPS) aims at establishing a more active EPS role in the relation of physics to society, taking seriously the challenge of maintaining a strong and critical dialogue between physicists and decision makers from policy and economics. FPS aims at catalyzing the dialogue through workshops and meetings, gathering decision makers and physicists to put the spotlight on topics of interest to both society and to the physics community. The fourth Forum Physics and Society (FPS) assembly took place in El Escorial, Madrid, Spain 21-23 October 2010, following earlier Forums in Graz, Austria (2006), Zakopane, Poland (2008) and Ratnieki, Latvia (2009).

The El Escorial forum addressed the overall topic of physics and science communication, dealing with three topics (i) Journalism and Communication of Science, (ii) The role of electronic media and scientific responsibility and (iii) Science communication, a tool for recruiting new students.

The meeting format consisted of select keynote speeches and panel discussions blended with workshops, formulating written recommendations for the European Physical Society to implement among its national members, divisions and groups. 30 participants with a proven interest in the topic participated and contributed with their insight.

Overall the Forum recognized a challenge for physics (and science) in its ability to

▼ A distant view of El Real Monasterio de El Escorial





communicate with its stakeholders. The fiscal crisis has clearly demonstrated the vulnerability of the science endeavor, which after a period with stable growth, now faces an uphill battle for regaining stable support and recognition. Common trends for all three working groups, as well as in the keynote presentations thus were the notion of scientific social responsibility and its manifestations in the interface between science and society, the renewal of the science system through new talented students coming into physics and, finally, the inability of the Forum fully to grasp the new possibilities available in social media. One basis of all discussions was the triangular relationship between the scientists (generation of results and information), the various media (transfer of information) and the public and its perception of science.

Recommendations were formulated by the FPS for action by the EPS. They can be found at: <http://fps.epscommittees.org/madrid-program/summary-conclusions>.

## Young Minds

**Chairman: A. Niederberger**

In 2010, the EPSYM Action Committee was launched as a platform for proactive young scientists to engage in self-organized activities that strengthen their scientific, outreach and networking capabilities.

In the first year alone, over 60 young scientists – advanced undergraduate students to postdoctoral researchers – have organized 7 sections from five countries. This initiative has begun to strengthen the ties between the new generation of

scientists within Europe and around the world, encouraging people to communicate actively with their peers, to build a strong professional network and to interact with more advanced scientists in the EPS community.

The Members of the EPSYM action committee have supported the buildup of new sections and made sure that the young scientists' needs were taken into account for the definition of the grant schemes, web platform and support structures.

The EPS YM has supported activities at the ICFO (Barcelona, ES), the University of Naples (Naples, IT), The National University of Ireland, Galway (Galway, IE), and the Bauman Moscow State Technical University (Moscow, RU). Activities include seminars for students, social activities, colloquia, as well as a public outreach activities.

# EPS DIVISIONS AND GROUPS

EPS has 11 Divisions, covering each of the specific fields of physics research. The 7 Groups look at questions of common interest for all physicists such as Physics for De-

velopment, and Technology. EPS Divisions and Groups organise many of Europe's leading physics conferences, allowing members of the European and global physics com-

munity to share their research and exchange with their colleagues. They also award many prestigious prizes and are involved in policy debates and physics outreach.

► Table 2:  
Conferences  
Organised  
in 2010

Conference	Place	Participants	Division
ECAMP 10	Salamanca, ES	630	Atomic, Molecular and Optics Division
EGAS	Salamanca, ES	300	Atomic, Molecular and Optics Division
Symposium on the Physics of Ionized Gases	Kopaonik	200	Atomic, Molecular and Optics Division
ESCAMPIG 20	Novi Sad, RS	350	Atomic, Molecular and Optics Division
Conference on Computational Physics	Trondheim, NO	218	Computational Physics Group
CMD 23	Warsaw, PL	200	Condensed Matter Division
QFS 2010	Grenoble, FR	300	Condensed Matter Division, Low Temperature Section
MPTL 15	Reims, FR	200	Education Division
European Energy Conference	Barcelona, ES	280	Energy Group
The Roots of Physics in Europe	Poellau Castle, AT	90	History of Science Group
Biomolecules and Nanostructures	Bedlewo	150	Physics in Life Sciences Division
37 Conference on Plasma Physics	Dublin, IE	750	Plasma Physics Division
3 <sup>rd</sup> Europhoton Solid State and Fiber Coherent Light Sources	Hamburg, DE	250	Quantum Electronics and Physics Division
CLEO Focus Meeting, ECOE	Turin, IT		Quantum Electronics and Physics Division

◀ Table 3:  
Prizes Awarded  
in 2010

Prize	Laureate	Division
CECAM Berni Alder Prize in Computational Physics	Roberto Car, Michele Parinello	Computational Physics Group
EPS Europhysics Prize	Hartmut Buhmann, Charles Kane, Eugene Mele, Laurens W. Molenkamp, Shoucheng Zhang	Condensed Matter Division
Gero Thomas Prize	Gunnar Tibell	EPS
Lise Meitner Prize	Juha Äystö	Nuclear Physics Division
PhD Research Awards	Xavier Davoine, Guilhem Dif-Pradalier, Emeric Falize and Berenice Louprias, Peter Manz	Plasma Physics Division
Plasma Physics Hannes Alfvén Prize	Allen Boozer, Jürgen Nührenberg	Plasma Physics Division
Plasma Physics Innovation Prize	Uwe Cazarnetzki	Plasma Physics Division
William Crooks Prize	Zoltan Donko	Atomic, Molecular and Optics Division

## EPS DIVISIONS

### Atomic Molecular and Optical Physics



**Chairman**  
• Friedrich Aumayr

#### Sections

- Electronic and Atomic Collisions
- Chemical and Molecular Physics
- European Group on Atomic Systems

#### Conferences

- European Conference Atomic and Molecular Physics (ECAMP)
- European Group on Atomic Systems Conf. (EGAS)

#### Website

- <http://ampd.epsdivisions.org/>

#### Prize

- EPS CMD Europhysics Prize

#### Website

- <http://cmd.epsdivisions.org>

### Education



**Chairman**  
• Robert Lambourne

#### Conference

- European Physics Education Conference (EPEC)

#### Prize

- EPS PED Secondary Teaching Award

#### Website

- <http://education.epsdivisions.org>

### Condensed Matter



**Chairman**  
• Eoin P. O'Reilly

#### Sections

- Liquids
- Macromolecular Physics
- Magnetism
- Semiconductors And Insulators
- Surfaces And Interfaces

#### Conferences

- CMD General Conference
- Liquid Matter Conference
- EDM Macromolecular Physics
- Joint European Magnetism Symposium
- ECOSS

### Environmental Physics



**Chairman**  
• Herbert Fischer

#### Conference

- under consideration

#### Prizes

A draft charter for an EPD award has been established aimed at a prize for young scientists and a medal for lifetime achievement in Environmental Physics. The coming period 2010-2012, sponsors are to be identified.

## High Energy and Particle Physics



### Chairman

- Fabio Zwirner

### Conference

- HEP General Conference

### Prizes

- The High Energy and Particle Physics Prize
- The Young Physicist Prize
- The Gribov Medal
- The Outreach Prize

### Website

- <http://eps-hepp.web.cern.ch/eps-hepp/>

### Conference

- EPS Plasma Physics Division Conference

### Prizes

- EPS-PPD Hannes Alfvén Prize
- EPS-PPD PhD Research Award
- EPS-PPD Innovation Prize

### Website

- <http://plasma.ciemat.es/>

## Joint Solar Physics



### Chairman

- Stefaan Poedts

The JSPD is a joint Division with:

- the European Astronomical Society (EAS) and
- the European Physical Society (EPS)

### Website

- <http://soho.estec.esa.nl/SPS/>

## Physics In Life Sciences



### Chairman

- Marek Cieplak

### Conference

- under consideration

### Website

- <http://info.ifpan.edu.pl/DPL/>

## Quantum Electronics and Optics



### Chairman

- John Dudley

### Conferences

- EPS-QEOD Europhoton meetings
- CLEO/Europe – EQEC
- Nanometa

### Prizes

- Quantum Electronics Prize
- Fresnel Prize
- 4 QEOD thesis prizes
- PhD student oral and poster prizes were introduced into the Europhoton conference series

### Website

- <http://qeod.epsdivisions.org>

## Nuclear Physics



### Chairman

- Zsolt Fülöp

### Prizes

- Lise Meitner Prize (Nuclear Science)
- IBA Europhysics Prize (Applied Nuclear Science and Nuclear Methods in Medicine)

### Highlights/News:

- <http://nuclear.epsdivisions.org/highlights-1/>

### Website

- <http://nuclear.epsdivisions.org/>

## Statistical and Nonlinear Physics



### Chairman

- Stephan Fauve

### Conference

- Applications of Physics in Financial Analysis

### Website

- <http://statistical.epsdivisions.org/>

## Plasma Physics



### Chairman

- Carlos Hidalgo

### Sections

- Beam Plasma And Inertial Fusion Section
- Dusty And Low Temperature

# EPS GROUPS

## Accelerators



**Chairman**  
• Oliver Brüning

**Conferences**  
• International Particle Accelerator Conference

**Prizes**  
• EPS Accelerator Achievement Prize for outstanding work in the accelerator field  
• EPS Accelerator Prize for recent significant contributions  
• EPS Accelerator Prize for an individual early career researcher for recent significant contributions  
• EPS Accelerator Prize for PhD or equivalent for the quality of their work  
• EPS Accelerator Prize for student poster

**Website**  
• <http://epac.web.cern.ch/EPAC/EPS-AG/Welcome.html>

## Computational Physics



**Chairman**  
• Peter Howard Borchers

**Conferences**  
• Conference on Computational Physics  
• Biennial Granad Seminars in Computational Physics

**Prizes**  
• Berni Alder CECAM prize

## Energy

This Group was formed in 2010



**Chairman**  
• Fritz Wagner

**Conferences**  
• National Energy Group Seminar  
• European Energy Conference

**Prizes**  
• under consideration

**Website**  
• under consideration

## Experimental Physics Control Systems



**Chairman**  
• Roland Mueller

**Conferences**  
• International Conference on Accelerator and Large Experimental Physics Control Systems (ICALEPCS)  
• Current Trends in Data Acquisition and Controls of Accelerator (CTDCA)

**Prizes**  
• EPCS Prize

**Website**  
• <http://epcs.epsdivisions.org/>

## History of Physics



**Chairman**  
• Peter Maria Schuster

**Conferences**  
• International Conference for the History of Science

**Website**  
• <http://history.epsdivisions.org/>

## Physics for Development



**Chairman**  
• Francois Piuze

**Conferences**  
• Examining proposal to create a European Conference on Science and Development

**Prizes**  
• Examining proposal to create Instrumentation Award for African Scientists

**Website**  
• <http://igpd.epsdivisions.org/>

## Technology



**Chairman**  
• Jan Vaagen

**Conferences**  
• under consideration



# EPS PUBLICATIONS

## Europhysics News



**Editor:**  
C. Sébenne

**Science Editor:**  
L.J.F. (Jo) Hermans

*Europhysics News* is the magazine of the European physics community. It is owned by the European Physical Society and produced in cooperation with EDP Sciences. It is distributed to all our Individual Members and many institutional subscribers. Most European national societies receive EPN for further distribution. The total circulation is currently about 25000 copies per issue. It is the main communications channel for the EPS

### Production

EPN, in addition to an Editorial Advisory Board that meets once a year, also has a Production Team that meets 3 times a year. The Production Team looks into each issue and provides feedback for improvement in the design, readability and content. Content of coming issues, development, and the relation among the partners is also discussed.

The number of "Highlights" from partner journals in physics has been limited to a maximum of 12 per issue. This section has proved to be popular, and since its introduction, the number of Highlights has steadily increased: 21 in 2006, 44 in 2007, 60 in 2008, and 66 in 2009.

### Development

EPN is published 6 times a year, with a limit of 32 pages per issue. Some of the information received for publication in EPN does not fit into the publication schedule of EPN. The Production Team has discussed this problem, and one of

the suggestions was to include a news section on the EPN website. The EPS Newsletter is a welcome proposal, as it would free EPN from publishing news of temporary interest such as conference announcements, prize calls and other important items, which currently are printed in EPN. EPN should continue to print news devoted to EPS actions, scientific reports on EPS conferences, prize and award laureates of the Society, etc. This has to be fed by all the bodies of the EPS.

An online version of EPN is freely accessible at [www.europhysicsnews.org](http://www.europhysicsnews.org). EDP Sciences will enhance the website, allowing authors to upload additional content such as videos. The usage statistics are encouraging and show a high proportion of visits come from the United States, and from India. The number of pdf download to the site in 2010 was 49,811, a marked increase over 2009 (34,257).

## EPL



**Editor in Chief:**  
M. Schreiber

**Science Editor:**  
G. Watt

EPL publishes original, high-quality Letters in all areas of physics, ranging from condensed matter topics and interdisciplinary research to astrophysics, geophysics, plasma and fusion sciences, including those with application potential. The Journal was founded in 1986 by the European Physical Society (EPS), the Société Française de Physique (SFP) and its subsidiary EDP Sciences, the Società Italiana di Fisica (SIF) and the Institute of Physics (IOP). The new journal incorporated Lettere al Nuovo Cimento

and Journal de Physique Lettres and was published by EPS, EDP Sciences and SIF since 2006. EPL is now published under the scientific policy and control of the EPS by EDP Sciences, IOP Publishing and SIF for a partnership of 17 European physical societies (the EPL Association).

### Development

The Impact Factor announced in 2010 was the first that reflects developments under the new publishing agreement. This is a good 2.893, a 31% rise from the previous value of 2.2 that had been fairly constant for the past decade. An objective for 2011 is to ensure the IF remains at this level or, hopefully, increases above a threshold of 3.0.

### Submissions and Publication

Submissions for 2010 totalled 1971, compared with 1877 submissions in 2009. The number of submissions from China continues to increase (48% in 4 years). Other significant increases are evident from Russia (92%), South Korea (54%), Switzerland (67%) and the UK (82%). The spread of submissions in 2010 was: Asia (49%); Europe (33%); N. America (9%). Co-editors based in N. America are actively recruited in as one of the actions to increase submissions from this area.

The number of published articles in 2010 decreased over 2009 (837 v 861), indicating stricter refereeing and acceptance criteria. The acceptance rate (averaged over all PACS codes) has decreased from 46% down to a more acceptable 41% although this varies among the PACS codes. The goal is an overall rate around 35%. The median acceptance-to-online time during 2010 is approaching 28 days

The most published PACS areas, topics in which EPL maintains strength, continue to be PACS=0 (181 articles this year) and PACS=70 (187 articles). Developing areas include PACS=40 (86 articles), PACS=60 (120 articles, and

PACS=80 (115 articles). In all these areas the number of published articles exceeds those published in 2009. The goal for 2011 is to focus on some exciting and developing topics that are either in the compilation list, or require new compilations, to prompt the community to use EPL as its primary publishing journal.

### Downloads & Citations

Full-text downloads from the website average around 42,000 each month. Four of the top 10 most downloading institutes lie in the USA. China and Japan have two each and India and Brazil have one each. The readership is spread 34% within Europe, and 28% to each of Asia and North America.

Iron-based superconductivity articles still dominate the top slots for numbers of citations and contribute significantly to the impact factor. However, the number of submissions in this topic decreased in 2010 and 'successor' key topics are now in focus. Interestingly, three of the most cited articles published in 2010 lie in PACS 80. As well as encompassing interdisciplinary science topics this category also contains a selection of physics topics that are applied in other disciplines – medico-, bio-, socio-, econo-, etc. This provides a boost to our applied science endeavour that will continue through 2011.

### Subscriptions

There were over 1100 subscriptions in 2010 exceeded 1100 representing over 1670 institutions. IOPscience licences are for online access only, but both IOP Packs and EDPS standalone customers may now choose either online only or online+print subscriptions.

Highlighted (Editor's Choice) summaries regularly appear in Europhysics News (EPN) and these are reprinted at the front of the first issue of each volume (4 times per year). This serves to promote these articles in regions EPN is not distributed.

## European Journal of Physics



**Editor:**  
J. Mostowski

With a world-wide readership and authors from every continent, European Journal of Physics is a truly international journal dedicated to maintaining and improving the standard of taught physics in universities and other higher education institutes. The journal is a joint undertaking of the EPS and the IoP and is published by the Institute of Physics Publishing.

### Development

2010 was a very successful year for European Journal of Physics. The impact factor for 2009 was 0.741, an increase from 2008 and is getting closer to the 2009 figure for American Journal of Physics (0.779).

The journal has a new Editor-in-chief, Professor Jan Mostowski of the Institute of Physics, Polish Academy of Sciences, became the Editor in Chief in autumn 2010. Retiring Editor-in-chief Alistair Rae has kindly agreed to join the editorial board for the journal.

In 2010, EJP published a special issue on

physics competitions, and will continue this initiative in 2011.

### Submission and Acceptances

The number of articles submitted in 2010 increased to 705 submissions compared to 604 in 2009. As with previous years a high proportion of total submissions come from Asia (27% of the total submissions). The number of submissions from Eastern and Western Europe has increased, (78 and 155 respectively, as well from the UK and N. America.

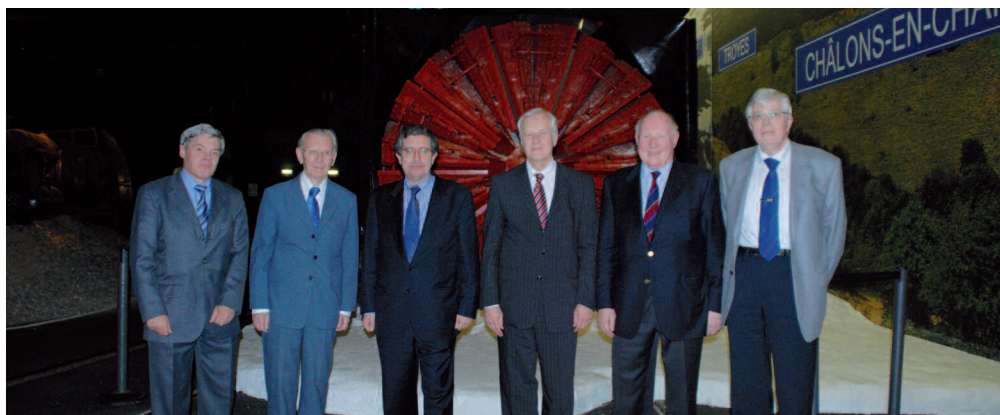
Although the number of submissions increased in 2010, the number of acceptances has decreased slightly. In total, 166 articles were accepted for publication in 2010 compared to 187 in 2009. One indicator of a good quality journal is a high rejection rate. 45% of the total articles accepted came from Western Europe, consistent with previous years. In 2010 a total of 1,712 pages were published. This includes the publication of one special issue, on the various physics competitions available to university students published in the July 2010 issue. Total downloads in 2010 increased to 222,189 v 218,102 in 2009.

### Subscriptions

The number of subscriptions in 2010 increased to 860, v 826 in 2009.

The IOPscience platform is now fully implemented (<http://iopscience.org>) and has led to increased subscription levels; the European Journal of Physics page can be seen at <http://iopscience.org/ejp>.

▼ Mariano Gago (Minister for Science and Technology of Portugal (1995-2002) with EPS past presidents at the last council meeting in Mulhouse, from left to right: Martial Ducloy, Herwig Schopper, Mariano Gago, Fritz Wagner, Martin C.E. Huber and Ove Poulsen









Achevé d'imprimer



European Physical Society

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6, rue des Frères Lumière - 68200 Mulhouse - France  
tel: +33 389 32 94 42 • fax: +33 389 32 94 49  
website: [www.eps.org](http://www.eps.org)

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