

ACTIVITY REPORT 2018

Presented to EPS Council, 05 - 06 April 2019



European Physical Society

more than ideas

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| President's Report | **Rüdiger Voss** |

INTRODUCTION FROM THE PRESIDENT

When asked to single out one highlight amongst EPS events and activities in 2018, the answer is easy: the EPS was founded on September 26, 1968, and on almost exactly the same date – September 28 – we could celebrate the 50th anniversary of our society in the same place where the inaugural session was held – the “Aula Magna” in the historic “Les Bastions” building of the University of Geneva. 1968 was a pivotal year in the history of post-war Europe, marked by global political turmoil and intense East-West confrontation. Against this background, today it seems like a miracle that the EPS was jointly established by scientists and scientific societies from both sides of the Iron Curtain – a strong and unequivocal message about the power of physics to build scientific bridges across political and cultural divides. The anniversary ceremony was an opportunity to look back at 50 years of sometimes turbulent history, to identify new challenges, and to sketch visions for the future. It was an outstanding success, notably thanks to four eminent keynote speakers: Luisa Cifarelli (former EPS President, now President of the Italian Physical Society); Serge Haroche (Nobel Prize for Physics 2012); Jean-Pierre Bourguignon (President of the European Research Council); and Ernst-Ulrich von Weizsäcker (Co-President of the Club of Rome). Much credit for the success of the Festakt goes to Chris Rossel who has steered the organization with his usual trademark drive and foresight, and I wish to thank him wholeheartedly for this wonderful achievement.

I started my previous report saying that “the EPS serves the European physics community in a twofold way ... through the classical activities of a learned society such as conferences, publications, and prizes; and by reaching out to political decision makers, media, and the general public”, and of course this dual mission has continued in 2018. Let me start with policy aspects, where more than ever Brussels has been in the centre of attention and activities. Naturally, the most important focal point has been the Commission proposal for the next Framework Programme, FP9 or Horizon Europe. The EPS welcomes the planned budget increase but is concerned that it will be insufficient to address the challenges of the next decade, and calls on the European Parliament and the EU Member States to further increase the proposed funding. The focus on “societal challenges”, while legitimate, risks to distort a healthy and sustainable balance between basic and applied research. Towards the end of the year, “cOAlition S”, supported by alliance of national and private funding agencies, caught the attention of the scientific community and policy makers with “Plan S”, an ambitious proposal to fully convert the publication of all results from publicly funded research to gold-standard Open Access by 2020. The EPS welcomes this objective as a medium- to long-term vision, but is concerned that its European focus does not address the global character of the scientific publishing business, and that the aggressive schedule risks to undermine the economic viability of a large number of journals and publishers, notably

CONTENTS

- 02 introduction from the President
- 04 Executive Committee Activities
- 05 Highlights from 2018
- 08 Financial Report 2018
- 09 Secretariat
- 10 Reports by EPS Action Committees
- 18 Journals Reports
- 25 Conferences and prizes in 2018
- 26 EPS Divisions and Groups

society publishers operating with limited financial reserves.

In the EPS point of presence in Brussels, Walter van Doninck has handed over the baton to Enrique Sanchez, who will continue the long-haul of forging a solid network of contacts with Commission offices, learned societies and research organisations with similar interests, and other stakeholders. It is a learning-by-doing exercise, and we are still experimenting with format and mission of our Brussels presence. A highlight of 2018 was the co-organisation of the annual STOA Lecture of the European Parliament in December, for which the EPS was able to nominate a prominent speaker on quantum technologies in the person of Anton Zeilinger. The participation of the EPS in this well-attended event was a fine conclusion of Walter's work for the EPS – an opportunity to express our thanks and to wish him all the best for a well-deserved retirement.

Notwithstanding the increasing importance of science policy action, physics remains the lifeblood of our society, and the expertise of our Divisions and Groups our scientific backbone. Amongst their most visible activities are the organization of world-class conferences and the award of prestigious prizes and distinctions, two areas where the EPS can boast a successful tradition. Whilst this is not the place to discuss the list of conferences in detail, I should like to single out the First EPS Conference on Gravitation which was held at La Sapienza University in Rome in September, organized by the Gravitational Physics Division. It was a successful and well-attended conference which bodes well for the future of our most recent Division.

A new addition to the list of EPS Prizes is the "Letokhov Medal" established in 2018 by our Quantum Electronics and Optics Division in memory of Vladilen Letokhov, (1939-2009), former Vice-Director of the Institute of Spectroscopy of the Russian Academy of Sciences and a pioneer of laser physics. Judging by the number and quality of nominations received, this medal has

established itself immediately as a prestigious distinction, and has found an outstanding first recipient in the person of Ferenc Krausz from the University of Munich. Congratulations to the prizewinner, and to all who worked hard to set up this new prize so successfully in record time.

In the realm of EPS prizes and distinctions, the "Historic Sites" programme takes a special place. While scientific prizes typically enhance the visibility of the recipient in the scientific community, the Historic Site distinction positions itself at the interface between science and the general public. In a few years, it has become an unprecedented success story, and in the EPS jubilee year we have again seen a rich harvest: six new sites have been inaugurated in 2018 and two more have followed already in the first quarter of 2019. I had the privilege of attending most of the award ceremonies, and each of them has been a well-organized and memorable event in its own right: promoting a better awareness of the rich history of physics, highlighting its importance for our daily life, and raising the profile of the EPS. Since its inception, the programme had been overseen by Luisa Cifarelli, who has recently handed over the chair of the Historic Sites Committee to Karl Grandin. I should like to express the wholehearted thanks of the EPS to Luisa for this fantastic initiative, and for her exceptional dedication.

An initiative that should not go unnoticed are new incentives to attract more Associate Members to the EPS. Several new schemes will introduce the principle of sponsorship in a more explicit way than this was the case in the past: the new "EPS Prestige Sponsorship" will allow an Associate Member to support a prestigious EPS Prize, whereas the "EPS Sponsorship for Societal Challenges" is aimed at actions or distinctions in areas such as physics for development, physics education, diversity, and career development of young physicists. Special thanks are due to Luc Bergé for his leadership in setting up these new programs.

Speaking about young physicists, no report by the President would be complete without mentioning the "Young Minds" (YM) initiative which is another EPS success story. Eight new sections joined the YM in 2018 which now comprises 57 sections in 30 different countries. In view of steeply rising numbers, the YM leadership has correctly identified a need for enhanced communication and networking which will be a priority for future action. At its meeting in Prague in May 2018, the YM Action Committee elected Roberta Caruso (Naples) to the chair, replacing Eva Salvador. Thanks to Eva for a job well done, and good luck to Roberta!

This short report can only scratch the surface and highlight a selection of recent events and developments, but cannot possibly do justice to all the excellent work that is done in our society – mostly as a volunteer effort. You will find many more details in the following pages. But once again, it is a unique opportunity to thank all those who work hard to keep the EPS at the forefront of service to the physics community and who, quite fortunately, are far too numerous to list individually. A special "thank you" goes to all Chairs of our Divisions and Groups; to the Members of the Executive Committee, and, last not least, to David Lee and his colleagues for efficient support from our Secretariat in Mulhouse.

At the 2019 EPS Council Meeting, in the magnificent venue of Split on the Adriatic Sea, I will hand over the Presidency to my successor. My two-year term as President has been a rewarding and challenging experience, and it has been a privilege to serve the EPS and the European physics community in this unique position. Under Petra Rudolf's presidency, the European Physical Society will be in safe and capable hands, and will continue to flourish. I wish her good luck, and look forward to working with Petra for another year as Vice President. I invite all Members of the EPS to support her in the same generous spirit in which you have supported me during the past two years. ■

| Honorary Secretary's Report | **Minh Quang Tran** |**EXECUTIVE COMMITTEE ACTIVITIES 2018**

The EPS Executive Committee develops the EPS policy, discusses ongoing activities, financial matters, future plans, and puts in practice effective strategies to improve the visibility of the EPS.

The Executive Committee typically holds three regular meetings per year where its members meet face-to-face. The EPS President, elected by the Council, chairs the Executive Committee meetings.

Since the 2018 Council meeting in April, the Executive Committee has met three times: on the 14-15 of June at INFN Headquarters in Rome (IT), on the 19-21 November at the IOP Headquarters in London (UK) and on the 14 February 2019 in at the EPS Secretariat in Mulhouse, France (D). Summaries of these meetings are published on the EPS Website and available to the Individual Members. Furthermore, on the 20 November, a dedicated meeting with Division and Group Chairs took place. The activities of all Executive Committee members are reported monthly in the e-EPS newsletter.

In 2018 the Executive Committee has addressed several items.

Enhancing the visibility and the influence of the EPS in the European instances is a priority item. The EPS Point of Presence in Brussels, W. van Doninck, was active in developing high level contacts to EU officials and with other learned societies. The EPS was invited to nominate the speaker at the Annual Lecture of the Science and Technology Assessment Office of the European Parliament in December 2018. The Executive Committee was active in drafting an EPS statement regarding Framework Programme 9, also known as Horizon Europe. The Executive Committee also piloted the update of the EPS Study on the Importance of Physics to the Economies of Europe.

The Executive Committee was active in continuing work on the framing document on Grand Challenges and on the many contributions of Physics to Society, written by physicists addressing people outside our community: policy makers, stakeholders, and general public. The project is associated to the activity of the Forum Physics & Society (FPS). The purpose, structure and content of the document have been defined

and a preliminary version will be presented and discussed at the next FPS meeting foreseen at the end of 2018. Invitations to join the editorial board for the framing document were sent?

2018 was the EPS's 50th anniversary. The Executive Committee supported the work of the EPS 50 Working Group, under the leadership of C. Rossel. The EPS 50 Working Group drafted the short articles published in EPN 49/2 and EPN 49/3, as well as the posters on Physics in Daily Life.

The Executive Committee followed closely the evolution of the EPL journal and the Europhysics News magazine. A transition of EPL to different business models, including "gold" Open Access, is under consideration. This latter would be in line with the current widely recommended EU publication strategy even though concerns exist about possible difficulties for institutions that cannot afford to pay the article processing charges.

The EPS was also active in developing a response to Plan S, an initiative of 12 national funding agencies in Europe to move quickly towards Gold Open access publishing.

MEMBERS	DIVISION AND GROUP	MEMBER SOCIETY
Bergé, L.	Atomic Molecular and Optics Division Quantum Electronics and Optics Division	Albania, Croatia, France, Macedonia, Montenegro, Serbia, Slovenia
Fantz, U.	Computational Physics Group History of Physics Group Physics for Development Group	Austria, Germany,
Jacquemot, S.	Plasma Physics Division	Denmark, Finland, Iceland, Norway, Sweden
Nappi, E.	High Energy and Particle Physics Division Accelerators Group Technology and Innovation Group	Italy, Armenia, Cyprus, Georgia, Greece
Pena, T.	Physics Education Division	Portugal, Spain
Rabinovici, E.	Gravitational Physics Division Physics for Development Group	Estonia, Latvia, Lithuania, Poland, Israel
Rudolf, P.	President	
Saunders, F.	Division of Physics in Life Sciences Environmental Physics Division	UK
Tran, QM	Joint European Solar Physics Division Energy Group	Liechtenstein, Switzerland, Belgium, Luxembourg, The Netherlands
Voss, R.	President-Elect	
Zadkov, V.	Statistical and Non-linear Physics Division	Russia
Zamfir, V.	Nuclear Physics Division	Bulgaria, Hungary, Moldavia, Romania, Turkey
Zwignagl, G.	Condensed Matter Division	Belarus, Czech Rep., Slovakia, Ukraine

At its meetings, the Executive Committee invites representatives of national physical societies, representatives from other learned societies, policy makers, and Chairs of D/G. In 2018, the EPS Executive Committee met with R. Citro, Chair of the Young Minds, a

very active Action Committee, and discussed strategies to strengthen the participation in particular from European Northern Countries.

The members of the Executive Committee play an important role in establishing and maintaining contacts

to Member Societies and D/G. Every Executive Committee member is the direct contact person for a small number of Member Societies. The same principle has been introduced to establish privileged contacts with the D/G as shown in the table. ■

HIGHLIGHTS 2018

HISTORIC SITES



▲ Luisa Cifarelli, first chair of the Historic Site Programme 2011–2018 and Karl Grandin, new chair. The sculpture is of Alfred Nobel the great donor. Photo: Rüdiger Voss.

The EPS Historic Sites (HS) initiative was introduced by Luisa Cifarelli during her presidency of the EPS. She has also successfully chaired the EPS HS committee for the past 8 years. In 2018 the committee membership was renewed, and while L. Cifarelli is still on the committee, she handed over the chair to Karl Grandin at the beginning of 2019. It is therefore very appropriate to thank her for her initial initiative and for her important work for many years on the committee. This work has proved so successful and such a good opportunity to raise the awareness of the important and fascinating history of physics in Europe, and of the role of the EPS. At the end of 2018 there were 44 HS inaugurated all over Europe, commemorating advances in physics through history. The

local ceremonies and attached activities are quickly publicised in various EPS channels. This initiative has also strengthened the links between the national societies of Europe and the EPS, as well as with the local institutions. But also, a collaboration with the APS in a few common historic sites should be mentioned. For much of this we owe our thanks to Luisa!

To set off the renewed committee and to appraise the work already done, it was decided that the committee should have its first ever physical meeting. This meeting took place in Stockholm during a cold winter's day at the Royal Swedish Academy of Sciences in January 2019. Luisa Cifarelli started the meeting by giving an overview of the work already done during her time as chair, where the impressive and varied list of historic sites inaugurated told of the success. The most important aspect might be that these events offer an excellent opportunity

▼ The attendees of the EPS Historic Site committee meeting in the Nobel Room at the Royal Swedish Academy of Sciences in Stockholm January 21, 2019. Sitting L–R: Ursel Fantz and Luisa Cifarelli; Standing L–R: Goran Djordjevic, Araceli Venegas Gómez (observer EPS Young Minds), James Hough, Alain Fontaine, Karl Grandin, Gina Gunaratnam (EPS secretariat), Rüdiger Voss and Joakim Cederkäll (secretary of the Swedish Physical Society).



to attract the public's attention in various places to the important contributions of physics to the development of modern society – that the scientific heritage is at the core of our European culture.

After the change of chair the committee discussed the guidelines for the proposals and submissions, as well as the best procedures and selection criteria. The committee had also invited the secretary of the Swedish Physical Society, while in Sweden, to get a better sense of how the national societies view the possibility to have an EPS HS awarded and how they plan their proposals. The varied backgrounds of the committee members make it multitalented, and the meeting resulted in a positive sense among the new and old committee members promising that it will operate well also in the future. While at the Academy of Sciences the local host took the opportunity to show some gems from the historical collections of the academy, which was generally enjoyed.

THE EPS 50TH ANNIVERSARY IN RETROSPECTIVE



Throughout 2018, the EPS and its Member Societies celebrated the 50th anniversary of the EPS. A special logo was created, as well as a number of handouts including a badge with the sentence “responsible science for a better world”, an external charger and a pen.

A series of short articles, highlighting the development of EPS was published in issues 49/2 and 49/3 of EPN. Some of the topics covered were on the Foundation of EPS in 1968, the development of its Member



Societies, of its Divisions and Groups, the history of EPS publications, the East-West relations, the importance of position papers, the move of its secretariat to Mulhouse, *etc.* News and information about special events in 2018 were also published in the e-EPS newsletter. Twelve roll-up posters were produced for display, covering various important themes of “Physics in YOUR life”. The roll-ups were available at EPS Council, at a number of national events, as well as at the annual STOA lecture in Brussels in December.

Several EPS Member Societies in France, Germany, Italy, the Netherlands, Serbia and the UK, among others, organised special events celebrating the 50th anniversary of EPS. The History of Physics (HoP) group had also a dedicated session during its 3rd International Conference on the History of Physics that took place in Donostia-San Sebastian on 17–21 October 2018.

The highlight of the year was definitely the Festakt organised on 28 September in the building “Les Bastions” of the University of Geneva. It took place in





◀ EPS presidents and guests in the EPS50 Festakt.

▶ Three of the twelve EPS rollout.

▼ Speakers of the EPS50 Festakt: Luisa Cifarelli, Serge Haroche, Ernst-Ulrich von Weizsäcker and Jean-Pierre Bourguignon.

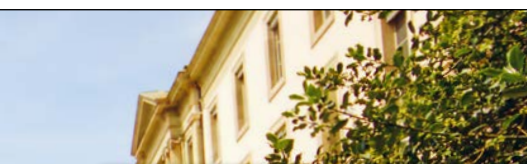


the same lecture theatre that hosted the inaugural meeting of the EPS in 1968, called today the Auditoire Olivier Reverdin. Almost 300 people attended the lively sessions. Between several musical interludes by the Quatuor “New Basel”, the programme included four invited speakers: Luisa Cifarelli reporting on the EPS story and its impact, Serge Haroche discussing how blue-sky science and technology nurture each other, Jean Pierre Bourguignon presenting the Pursuit of Knowledge as a European Endeavour,

and finally Ernst-Ulrich von Weizsäcker expressing his view on Science and long-term thinking. A round table discussion chaired by Martina Knoop, addressed the role of physics and science in our civil society. The official ceremony ended with a lively and rich apéro-dinner.

A dedicated website was created www.eps50.org, where further information can still be found.

The Executive Committee thanked **Christophe Rossel** for his outstanding work in managing the EPS 50 celebration.



◀ The building “Les Bastions” of the University of Geneva.

▼ Celebration of EPS 50 Anniversary.



OPEN SCHOOLS FOR OPEN SOCIETIES



Our schools should be incubators of exploration and invention. They should be accelerators of innovation. They should promote Open Schooling. School leaders should set a vision for creating learning experiences that provide the right tools and supports for all learners to thrive. Teachers should be collaborators in learning, seeking new knowledge and constantly acquiring new skills alongside their students. A holistic approach to innovation is needed. We need to facilitate the process with a provision of the necessary catalyst:

- This is the role of the EU funded project Open Schools for Open Societies (OSOS), to describe and implement at scale a process that will facilitate the transformation of schools to innovative ecosystems, acting as shared sites of science learning for which leaders, teachers, students and the local community share responsibility, over which they share authority, and from which they all benefit through the increase of their communities’ science capital and the development of responsible citizenship.
- The Open Schools for Open Societies project creates a core network of a thousand schools that together form hundred hubs in twelve countries. All these schools will be involved in the project in two implementation phases (school year 2018-2019 and school year 2019-2020).
- The consortium of the OSOS project is composed of a total of 19 partners representing 10 European (Greece, Finland, Germany, Spain, Netherlands, Bulgaria, Italy, France, Portugal, Ireland) and 3 non-European countries (Israel, Australia and US). OSOS partners vary from school authorities, to science centres and museums, policy making organisations, universities and European associations, including the European Physical Society. ■

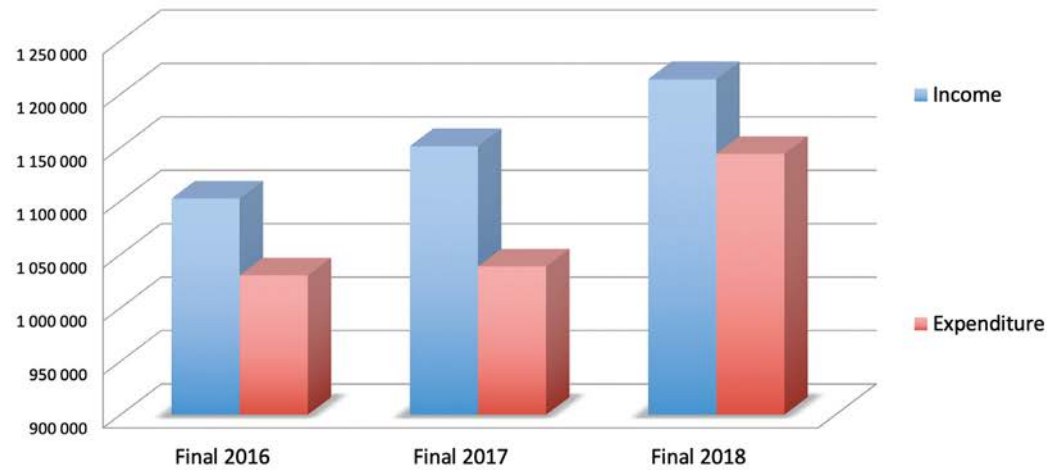
| EPS Honorary Treasurer's Report | **Frances Saunders** |
FINANCIAL REPORT 2018

2018 was a successful year financially, with income out-turning at € 1,214,120, of which 53% came from Members, 29% from publication activities and 19% from conferences and other activities. The expenditure for 2018 was € 1,144,134, 36% for administration and governance, and 64% for activities. The outcome for the year was therefore an excess of € 69,986.

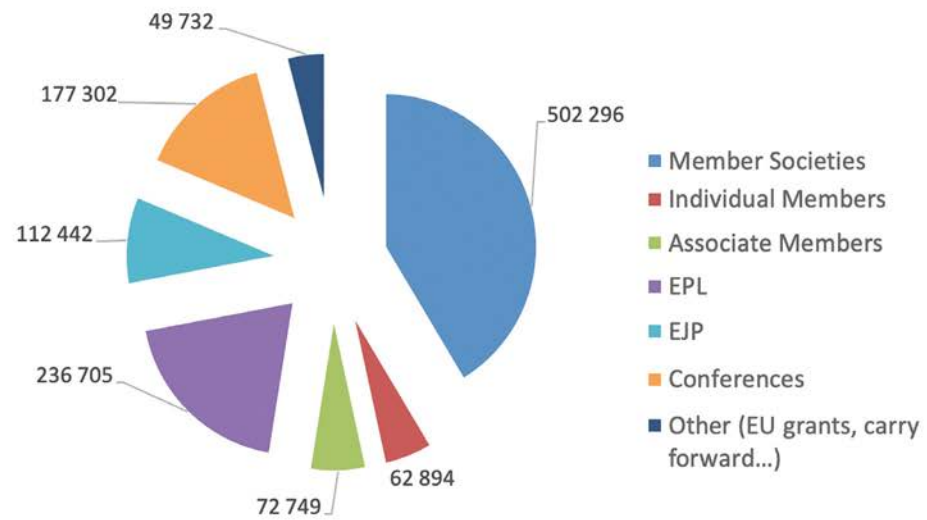
Income in 2018 was 4% more than budgeted, due mainly to an increased contribution from Conference Services, arising from the organisation of the Europhoton and Ultrafast Phenomenon Conferences. Administrative expenditure in 2018 was substantially lower than the budget (€305,305 v €347,440), due principally to reduced salary costs. The activity expenditure increased by 2%, due in part to increased costs for EPS 50 activities and increased investment in the European relations programme.

Substantial work has been done in producing accounts that are more readable. This work will continue. My thanks to the Secretary General and his staff for maintaining control of EPS's financial position throughout the year.

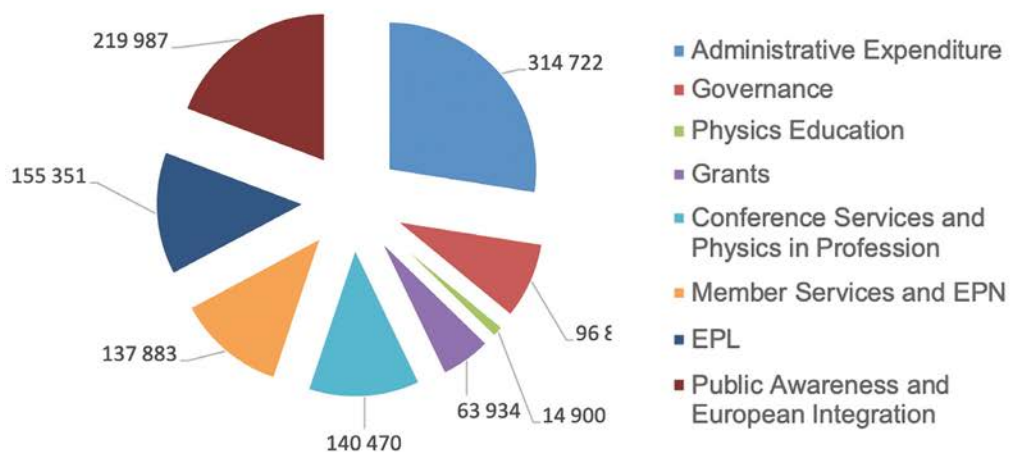
Income and Expenditure 2016 - 2018 (in Euro)



Income 2018 (in Euro)



Expenditure 2018 (in Euro)



SECRETARIAT

The Secretariat of the European Physical Society is headquartered on the campus of the Université de Haute Alsace, in Mulhouse, France. Staffing fluctuated throughout the year, linked mainly to conference activity and some natural staff turnover. At the end of 2018 the EPS employed 9.9 FTE, in 3 main areas: Core Secretariat (4.9); Conference Services (2), and the EPL Editorial Office (3). In addition, the UHA has made a full-time secretary available to the EPS.

The Core Secretariat provides administrative services to the EPS, including accounting, graphic design, and information technology. Among the main tasks are the preparation of Europhysics News and e-EPS, website maintenance and design, financial

control, invoicing *etc.* The Secretariat also supports Divisions and Groups, and the activities of EPS Committees, and the Executive Committee. European relations, relations with other societies, communications, outreach, policy monitoring and EPS involvement in EU projects are also part of activities of the Core Secretariat.

The Conference Services department provides a full range of services for conferences organised by EPS Divisions and Groups. These include committee management, web site design and maintenance, communication, onsite logistics, online paper submission and maintenance, budgeting, *etc.* Much work was undertaken to develop a clearer method of presenting

the services and the advantages of EPS Divisions and Groups to use the EPS services. Conferences organised by the EPS Conference Service Department in 2018 were 8th Europhoton, in Barcelona (ES) in Seefeld, AT and Ultrafast Phenomenon in Hamburg (DE). The Conference Services Department was also instrumental in the EPS Festakt, and the Forum Physics and Society Meeting in Geneva (CH).

EPS headquarters in Mulhouse also houses the EPL editorial office: the staff editor, as well as 2 editorial assistants. In 2018, the EPS Editorial Office handled 1,327 manuscripts. The median submission-to-online time during 2017 remains below 100 days consistent with the previous year. ■

▼ Top: F. Burr, S. Loskill, D. Lee, G. Gunaratnam - Middle: P. Padovani, X. de Araujo, P. Helfenstein, A. Ouarab - Bottom: S. Fila, O. Fornari, K. Desse.



REPORTS BY EPS ACTION COMMITTEES

COMMITTEE ON EUROPE INTEGRATION

Chair: Radu Constantinescu

EPS - CEI Present Composition

The present composition of the Committee is (in alphabetic order):

- **Radu Constantinescu**, University of Craiova, Romania (chair).
- **Goran Djordjevic**, University of Nis, Serbia.
- **Maciej Kolwas**, Institute of Physics of the Polish Academy of Sciences, Poland.
- **Dénes Lajos Nagy**, Hungarian Academy of Sciences, Budapest, Hungary.
- **Alexei Morozov**, ITEP Moscow, Russia.
- **Sofoklis Sotiriou**, Ellinogermaniki Agogi Pallini, Greece.
- **Gertrud Zwicknagl**, Institute of Mathematical Physics Braunschweig, Germany.

EPS – CEI Strategy

In 2018 the activity of EPS-CEI followed the five main directions established in the general strategy adopted by the Committee, strategy aiming to promote Physics and the scientific cooperation across Central, Eastern and Southern parts of Europe. The five directions are:

1. Integrating the access to research infrastructures in Europe.
2. Student training through a School Program supported by EPS.
3. Physics education and teacher training.
4. Strengthening the regional cooperation among EPS member societies and other regional organisations.
5. Promotion of physics in the regions.

Synergy with other organisations

Establishing synergies with other important organisations from the region represented an important objective of the Committee. Specifically, the following stakeholders were considered:

- CERN Geneva
- ICTP Trieste
- CEI – Central European Initiative Trieste
- UNESCO (Paris & Venice Office)

- BPU – Balkan Physical Union
- SEENET MTP - South-Eastern European Network in Mathematical and Theoretical Physics.

Specific activities in 2018

- 1) A round table “Research and Education in Physics”, with the participation of CEI-EPS members, of representatives of national Physics societies and of other organisations from Central and South-Eastern Europe, was held in Sinaia (Romania) on April 19th, 2018. It was included as a distinct event in the program of the conference “Quantum fields and Nonlinear Phenomena” (18 – 22 April, 2018), with more than 70 participants. http://cis01.central.ucv.ro/physics/en/workshop_Sinaia_2018/index.html

The event had as main objective the strengthening of the cooperation among researchers and Physics educators from South-Eastern part of Europe. EPS-CEI was represented by Radu Constantinescu, Goran Djordjevic, Alexei Morozov, Denes Lajos Nagy and Gertrud Zwicknagl. David Lee, the EPS general secretary, as well as representatives from CERN, ICTP and SEENET-MTP attended the meeting. The amount allocated from the EPS-CEI grant: 4,000 Euro.

- 2) An important activity related to the EPS-CEI actions of training the PhD students from the South-Eastern part of Europe was the School “*High Energy and Particle Physics: Theory and Phenomenology*”, held in Niš (Serbia), 3-10 June 2018, attended by 40 students from 10 countries. The School, partially supported by EPS –CEI, was part of a running CERN – SEENET-MTP Program for PhD students and young scientists. The event was also connected with another large scientific meeting: the Balkan Workshop Field Theory and the Early Universe, as well as with several events celebrating the 50th anniversary of the EPS and 15 years of SEENET-MTP.

<http://bsw2018.seenet-mtp.info/>. Rüdiger Voss, the EPS President, David Lee, the EPS General Secretary, Alexander Petrov, the BPU President, as well as renowned scientists from CERN, ICTP and other European and institutes attended the meetings. The amount used from the EPS-CEI grant: 4,000 Euro.

- 3) A meeting of the EPS-CEI Committee took place in Geneva, in Sept. 2018 and it was occasioned by the celebration of the 50th anniversary of the EPS. It was an important meeting, as members of EPS-CEI Radu Constantinescu, Goran Djordjevic, Maciej Kolwas and Gertrud Zwicknagl had the opportunity to foresee the main objectives and to plan the 2019 activities. The main outcome of these discussions was the potential in 2019 of a common activity of EPS-CEI with the DPG board. The participation in this meeting was not supported by EPS-CEI budget.
- 4) Another activity not supported through the EPS-CEI budget but very important in terms of strengthening the cooperation in the region, was the participation of some EPS-CEI members in the 10th Jubilee Conference of the Balkan Physical Union (BPU10) held in Sofia (Bulgaria), from August 26th to August 30th, 2018. Presidents and representatives of National Physics Societies from 10 South-Eastern European countries participated and discussions on jointly organised activities took place. The perspective of organising a large research-training meeting in Ioannina (Greece) and organisation of the First Balkan Olympiad in physics in 2019 were evoked. The EPS-CEI members Goran Djordjevic and Radu Constantinescu were elected as President, respectively Vice-President of BPU.

Action Plan for 2019

The activities considered to be supported in 2019 through the EPS-CEI budget are:

- The South-Eastern European PhD school and conference to be jointly organised

with CERN and SEENET-MTP in Ioannina (Greece). As in the previous case, participation of students from Central European countries will be partially supported.

- The first edition of the Balkan Physics Olympiad to be organised in Greece, contest addressed to high school students.
- Supporting the participation of PhD students and scientists, mostly from the South-Eastern Europe, in two conferences: IPSEC XIII that will be held in Wroclaw (Poland) and BGL XI held in Kiev (Ukraine).
- The next meeting of the EPS-CEI will be organised jointly with BPU, with invited participants from DPG, CERN and EPS, with an accent on training and interplay between science, education and art.

CONFERENCE COMMITTEE

Chair: Dominique Vernhet

Conferences, Workshops, and Summer Schools are essential elements in the communication of physics, the career development of physicists, the promotion of physics towards students and young scientists, and for the reputation, the credibility, and the visibility of the EPS and physics research activities. The role of the Conference Committee is to advise the EPS Executive Committee on the development of all activities and programmes in the area of such scientific events, and to administer EPS Conference grants. The committee members are Dominique Vernhet (Chair), Ophelia Fornari (Secretary), Marian Reiffers (former EPS ExCom from April 2016) and Christian Beck (Chair EPS SNPD).

The Conference Committee is responsible for collecting and disseminating information on both Europhysics Conferences (*i.e.* conferences organised by EPS Divisions and Groups), and for evaluating applications to obtain the label of EPS Sponsored Conference. Conference organisers may also request EPS Conference patronage, which is awarded upon approval of the President and entitles the organisers to use the EPS logo and communications network to disseminate information.

This year, accordingly to the decision made by the EPS Executive Committee end of 2017, in the frame of the gender fairness in Physics, we launched a monitoring of the women participation in the physics conferences organised by the EPS. In this respect, the local organising committee of all the conferences labelled by the EPS must engage themselves to collect and send the result of the monitoring of women participation to the EPS Conference Service. This has been added as one of the required criteria in the conferences guidelines when applying for any of the EPS label. It will allow the Conference service to collect those statistics over a two years period and the President of the EPS Equal Opportunity Committee to present a compilation of these statistics at the first Executive Committee meeting of the year 2020. Note that in return, the conference organisers should have received the EPS “Monitoring for Gender Fairness” Label together with the EPS logo, but this has not yet been implemented.

Conferences/ scientific events

The Conference Committee received **26 applications** of conferences/events for 2018. Among them, 11 Europhysics and 13 EPS Recognised conferences have been approved for 2018, 2 rejected applications. The committee already received 7 requests for 2019.

In 2018, the conferences organised by the EPS Conference Service were the Ultrafast Phenomena Conference in Hamburg, Germany with 572 participants, the Europhoton Conference in Barcelona, Spain with 250 participants, In addition the EPS Secretariat was involved in the organisation of the 7th EPS Young Minds Leadership Meeting, in Prague, Czech Republic, the EPS50 anniversary in Geneva, Switzerland and the Forum Physics and Society in Geneva, Switzerland too.

Conference Grants

The EPS makes grants available to the organisers of Europhysics conferences to allow for the participation of **Young Scientists** in their meeting. Per conference a maximum of 3 grants of 350 € each can be distributed. In 2018, grants totalling **€ 6 950** were distributed.

IM Travel Grants: The EPS makes grants available to individual members (IMs) of the EPS to allow for the participation in an EPS labelled (Europhysics or Recognised) conferences. Members may receive a grant of 350 € only once and may request support only in the first 3 years of their membership. 10 such grants were distributed in 2018, for a total of **€ 3 500**.

Invited Speaker Grants: The EPS makes grants, of 500 € each, available to conferences organised by EPS Divisions and Groups (Europhysics conferences) to cover costs of invited speakers. 7 grants were distributed in 2018, *i.e.* **€ 3 500**.

EPS Poster Prize: Grants, of € 200 each, are available to EPS Europhysics or Recognised conferences for a poster prize, to make an award to a student who has presented the best poster at the conference. 16 prizes were awarded in 2018, *i.e.* **€ 3 200**.

Special Meetings Support

The EPS makes funds available for some special events. In 2018 the EPS supported the following events: IONS and the BPU conference for a total amount of 3 000 €.

In conclusion, in 2018, the total spent was **€ 20 150**. Further information on EPS conferences and grants, including application procedures, is available on the EPS website.

DISTINCTIONS AND AWARD COMMITTEE

Chair: Jo Hermans,
Members: Angela Bracco,
Elisabeth Rachlew, Marian Reiffers

The following distinctions and prizes were awarded during the year:

- **Tony Bell** was awarded the Hannes Alfvén Prize 2018 through the Plasma Physics Division.
- The 2018 EPS Condensed Matter Division Europhysics Prize was awarded to **Lucio Braicovich** and **Giacomo Ghiringhelli** of the Politecnico of Milan for the development and scientific exploration of high-resolution Resonant Inelastic X-ray Scattering (RIXS).

- The EPS-PPD Board has awarded the Innovation Prize 2018 to professor **Arutiun Ehiasarian** of Sheffield Hallam University, UK.
- **Angela Oleandri**, past SIF Editorial Director, was awarded the 2018 Gero Thomas Medal award of the European Physical Society (EPS) for her outstanding and sustained contributions to the development of physics publications in Europe, including her support to the creation and development of the EPJ series of journals and EPL (Europhysics Letters).
- The Winter 2017 EPS Emmy Noether Distinction for Women in Physics goes to Dr. **Françoise Remacle** from the University of Liège in Belgium.
- The EPS Edison Volta Prize for the year 2018 was awarded to **Alain Brillet** (Observatoire de la Côte d'Azur, Nice, France), **Karsten Danzmann** (Max-Planck-Institut für Gravitationsphysik and Leibniz University, Hannover, Germany), **Adalberto Giazotto** (INFN, Pisa, Italy) (posthumously) and **Jim Hough** (University of Glasgow, UK) for the development, in their respective countries, of key technologies and innovative experimental solutions, that enabled the advanced interferometric gravitational wave detectors LIGO and Virgo to detect the first gravitational wave signals from Black Holes and Neutron Stars.
- **Pedro Miguel Echenique**, President of the Donostia International Physics Center (DIPC), and **Luciano Maiani**, Chairman of the Scientific Council of the International Centre for Theoretical Physics, former CERN Director General, have been awarded Honorary Membership of the European Physical Society.
- The EPS welcomed the following individuals as Fellows: **Herzl Aharoni** for his ground breaking contributions and accomplishments in the invention, research, development, and realisation of wide range of practical, cost-effective, efficient, single crystal Silicon Light Emitting Devices and by pioneering a systematic transformation of physics into technology, and to **Els de Wolf** for

her outstanding contributions to both fundamental and applied physics, to the EPS, to the NNV, to education and to the society at large.

- The 2018 European Physical Society Achievement Award was awarded to **Giorgio Benedek** for his numerous contributions to the European Physical Society, the physics community at large, and most recently for his truly outstanding efforts as Editor-in-Chief of EPL.
- The EPS Plasma Physics Division Board awarded its 2018 PhD Research Award to **Matteo Falessi** of Roma Tre University, for his thesis on “Gyrokinetic theory for particle transport in fusion plasmas”, to **Jack Hare** of Imperial College London, for his thesis on “High energy density magnetic reconnection experiments in colliding carbon plasma flows”, to **Adrien Leblanc** of the University of Paris-Saclay, for his thesis on “Plasma mirrors and plasma gratings under ultra-intense laser illumination: high-order harmonic generation, and relativistic electron beams” and to **Wei Zhang** of Ghent University, for his thesis on “Plasma edge modeling with ICRF coupling”.
- The Winter 2018 EPS Emmy Noether Distinction for Women in Physics was awarded to **Chiara Mariotti** from the University of Torino and CERN for outstanding contributions to the discovery and characterisation of the Higgs (H) boson at the LHC, and her leading role as founder and coordinator of an LHC-Wide “Higgs Cross Section working group”.
- The Lise Meitner 2018 Prize was awarded to **Peter Ring** (Technische Universität München) and **Peter Schuck** (Institut de Physique Nucléaire Orsay) for their enormous impact on both theoretical and experimental many-body nuclear physics. In particular P. Ring developed new investigations in high-spin phenomena, collective vibrations and relativistic nuclear energy density functionals while P. Schuck introduced new approaches for nuclear matter in connection with nuclear superfluidity and alpha-particle condensation.

EQUAL OPPORTUNITIES COMMITTEE

Chair: Luc Bergé

During 2018 the Equal Opportunity Committee (EOC) of the EPS has been engaged in several actions aiming to promote a balanced gender representation in physics.

The Committee is composed by Luc Bergé (Chair), Martine Bosman, Nadia Martucciello, Ana Proykova, Elisabeth Rachlew, Enrique Sánchez (Young Minds Action Committee representative) and Els De Wolf.

In 2018 the EOC has attributed the Emmy Noether distinction in Winter. The Emmy Noether distinction aims to bring to the wider attention of the scientific community, and of the general public outstanding female physicists, identifying them as role models for the young generations of physicists. Nominations may be submitted at any time; a selection committee appointed by the EOC examines them twice per year typically in Spring and in Autumn. News about the winners is published right away in the electronic newsletter e-EPS and on the EPS web site. The 2018 laureate for the Winter edition of the Emmy Noether Distinction is Dr. Chiara Mariotti, INFN Torino, awarded “for her outstanding contributions to the discovery and characterization of the Higgs boson, for her leading role as founder and coordinator of the LHC-wide Higgs Cross Section Working Group, and for her impressive capacities and achievements in outreach, in particular towards the young generation of physicists.”

Moreover, the publishing in the electronic newsletter e-EPS of short portraits with interviews of young female researchers in physics (program called “Visibility for young”) will also be pursued. The idea that inspired the program “Visibility for Young” is that a young female candidate physicist (student, post-doc or young researcher) may find in the interviews of successful female physicists some encouraging answers to the questions about the choice of making or not a career in physics. The program benefits of a close collaboration with the Young Minds Action Committee. It will be continued in 2019.

In 2018, in collaboration with Divisions and Groups, the monitoring program on the gender participation at conferences, which is prepared jointly by the EOC and the Conference Committee of EPS, in cooperation with Société Française de Physique, has yielded its first feedbacks from 15 conferences, workshops and summer schools supported by the EPS. The first statistics extracted from these data, although rather good since it shows an encouraging representation of women comprised between 17 and 26% depending on the scanned categories (speakers in plenary sessions, session chairpersons *etc.*), need further improvement. Therefore, the effort has still to be continued and similar surveys will regularly be organised.

In addition, several links have been reinforced with SFP and the European Platform for Women Scientists. A threshold of 20% of women in all EPS committees is targeted in our future actions. The Divisions and Groups will be invited to fulfil this criterion as well as delegating one person in their Board to the promotion of women in physics. Some fundraising calls towards the EPS Divisions and Groups are planned in order to fund a medal for the Emmy Noether distinction. A project of calendar displaying the winners of the Emmy Noether Distinction and leading women figures in science is also in progress.

2018: Founding the Vladilen Letokhov Medal

The Vladilen Letokhov Medal has been created in cooperation between the Quantum Electronics and Optics Division (QEOD) and the Atomic, Molecular and Optical Physics Division (AMOPD) of the EPS, and the Institute of Spectroscopy of the Russian Academy of Sciences (ISAN/RAS) in Troitsk/Russia. The idea is to propose a prestigious award that will reconnect and strengthen our relationships with Russian scientists, whose heritage in physics has been deeply impactful for our society in the past centuries. The Medal has been established in memory of Professor Vladilen S. Letokhov (1939-2009), former Vice-Director for research of the Institute of Spectroscopy of the Russian Academy of Sciences (ISAN), to recognise outstanding contributions in the field of laser-matter interaction, in particular

spectroscopy of atoms and molecules, laser manipulation of atoms, and strong field processes. The medal will be presented every odd year at a major conference alternatively sponsored by the QEOD and AMOPD Divisions of the EPS.

The prize will consist of a medal, a certificate and a monetary award whose amount shall be determined by agreement between the QEOD and AMOPD boards in the year preceding the presentation of the award. This sum is presently set at 5000 euros, partly supported by ISAN/RAS. In 2019 the first edition of the Letokhov Medal will be presented at the ECAMP Conference organised by AMOPD in Firenze between April 8-12, 2019. This year the prize committee has been chaired by Luc Bergé.

FORUM PHYSICS AND SOCIETY

Chair: Carlos Hidalgo

EPS statement on physics and ethics in the 2050 horizon

Scientific knowledge is not only an understanding of the world, but an understanding that enables people to imagine and shape the future. Science is a unique human activity used by different stakeholders in activities ranging from basic research to technological development. Stakeholders include not only professional organisations, universities, industry and government agencies but also citizens and civil society organisations.

Today the pace of scientific discoveries and innovation is accelerating drastically and science and technology are likely to increase their already important influence on society and human affairs in the Horizon 2050. Reflection on the ethical dimension of science - and physics is an important part of it - and its application is needed if we are to optimise the beneficial use of science in society.

Science as a non-ethically neutral actor

Per se the quest for scientific knowledge may seem ethically neutral. Nevertheless, as soon as we consider it in the setting of society, it drops its neutrality. The very

choice to fund science rather than other human activities can be itself subject to ethical scrutiny. The way scientific knowledge is generated is also subject to ethical rules, depending on and evolving with society. The impact of technological developments undertaken to tackle major issues directly affects the lives of citizens and the environment and are not without ethical consequences. Examples include health research and life sciences, where the interests of science, society and corporations can compete with individual liberties and wellbeing, or in the research for sustainable development, where the desires of individuals can compete with the common good of society and humanity.

EPS observation: Fundamental science and its derived technologies have been tremendously successful in improving the quality of life of citizens. EPS is committed to lead an ethical reflection on these developments, considering opportunities and threats for science, citizens and society.

EPS observation: As the potential of science and technology grows, fostering their benefits - while mitigating their challenges - is a key issue for sustainable development, requiring a global ethical governance of science and technology.

Technology development: power gains and vulnerabilities

We live in an increasingly technical era where many believe that technology has the answers to key open questions while others experience fear regarding its developments. Artificial intelligence (AI) will soon lead us through a fascinating landscape of development as well as deep ethical considerations. This is particularly the case when AI algorithms take on cognitive work, for example in the job market, security and life sciences (*e.g.* physics for health, genetic engineering), where there are huge social dimensions to be considered. Other technological fields will experience this ambivalence in one way or another. The Internet can boost our communication capacities but at the same time make our privacy rights more vulnerable. Furthermore, we are facing a transition in the way we generate and

VIII EPS FORUM PHYSICS AND SOCIETY

PHYSICS AND ETHICS FOR SOCIETY IN THE HORIZON 2050



SEPTEMBER
29, 2018

ORGANISED BY
THE EUROPEAN PHYSICAL SOCIETY
The meeting will take place in the University of Geneva, Switzerland
www.forumphysicsandsociety.org

Although the quest for knowledge in itself is not necessarily susceptible to ethical evaluation, science should abandon its ethical neutrality when it addresses the way knowledge is achieved and the technological applications that affect the needs and desires of individuals and society. Furthermore, the development of artificial intelligence will lead us through a fascinating landscape of development as well as ethical considerations. These issues will be the key elements for discussion during the forthcoming Forum Physics and Society.

STRUCTURE OF THE MEETING:

- Topical lectures (3 hours) on: health research, sustainable development, artificial intelligence, physics in living matter, our place in the universe
- Round table discussion (2 hours) to address questions
- Conclusions and drafting of EPS statement

Register ON LINE at www.forumphysicsandsociety.org/registration
before September 15th, 2018

use energy, with new drivers like climate change and globalisation highlighting the importance of a culture and ethic for sustainable development.

EPS recommendation: EPS is committed to confront ambivalences linked to technology developments. Consequent power gains and vulnerabilities should be considered along with the technological developments, with the aim of preventing inequalities in that respect [1].

EPS recommendation: The EPS encourages the European as well as the international community to foster further convergence on risk and safety culture and ethical issues.

Open communication and critical citizens

Science has given us the ability to cope with problems of the world, allowing us the option of not just believing things but instead the powerful ability to critically analyse them. New technologies allow large-scale information sharing, thus accelerating the spreading of information but also misinformation (fake news). In this context, science and citizens have an important role to play. Solutions to the difficult questions and threatening perspectives that lie ahead of us (*e.g.* climate change and the future of energy sources in a multidisciplinary scientific environment) will be found through

well-founded views and thanks to well-informed and engaged citizens.

EPS recommendation: The EPS encourages the European as well as International Scientific Societies to engage in an open dialogue with citizens and civil society organisations in order to raise the critical spirit of citizens and the awareness of researchers regarding the use of science for the benefit of mankind and its environment and their adherence to the highest standards of quality and responsibility [2].

Research, education and sustainable development

Science needs more than just research to contribute to social progress. The latter depends on the mutual interaction between science, politics, economics, citizens and society at large. Values, political and economic considerations influence what is done with discoveries and how different fundamental science and technological developments are prioritised. Science should aim to contribute to raise sustainable standards of living globally, which will require long-term perspectives on international cooperation and more substantial investments in research, education and development.

EPS recommendation: Ethical governance should be further promoted across the globe with scientists seeking ways to foster the basic fundamental human rights of dignity, freedom, equality and solidarity. To that end, the EPS encourages Academia, educational institutions and science teachers to include and implement elements of ethics education in school and university physics curricula. Strategies to improve the attractiveness and effectiveness of science education (especially for young people) should be further explored and their implementation encouraged [3].

REFERENCES

- [1] This is particularly important in physics for health, where some technologies are unevenly implemented in European states. In particular, the recent report on accelerators research and development in Europe shows a strongly uneven distribution of operating proton therapy centres [<http://apae.ific.uv.es/apae>].

- [2] European Academies (ALLEA) and the European Science Foundation (ESF) have developed the European Code of Conduct for Research Integrity [<http://www.allea.org/>]. The European Group on Ethics (EGE) advises the European Commission in science and new technologies [<https://ec.europa.eu/research/ege/index.cfm?pg=home>]. Responsible Research and Innovation is cutting across the whole Community Framework Programme for Research and Innovation Horizon 2020 [<https://ec.europa.eu/programmes/horizon2020/en/h2020-section/responsible-research-innovation>].
- [3] This would be consistent with UNESCO's Recommendation on Science and Scientific Research [http://portal.unesco.org/en/ev.phpURL_ID=49455&URL_DO=DO_TOPIC&URL_SECTION=201.html]

HISTORIC SITES

Chair: Karl Grandin

In his editorial in *EPN* 49 5/6 EPS president Rüdiger Voss concludes that it was evident that the Historic Sites (HS) has been “a remarkable success story”. He notes both the varied historical, thematic and geographical spread of the inaugurated sites. A list with links to short presentations of most HS are available at the following EPS site:

https://www.eps.org/general/custom.asp?page=distinction_sites

Throughout 2018, several sites were inaugurated. In June the Institute of Spectroscopy (ISAN), Troitsk, Russia, was inaugurated in connection with the 50-year jubilee of the ISAN, where research in many fields have been successfully conducted. A few days later the Dunsink Observatory under the auspices of Dublin Institute of Advanced Studies got inaugurated. This is the place where the mathematical physicist Sir William Rowan Hamilton worked. Another kind of observatory in the Northernmost part of Europe was the Halde geomagnetic observatory that Kristian Birkeland initiated in 1896 to make observations of the Aurora Borealis. Going back to

the mid-19th century the EPS HS in Heidelberg commemorating the important contributions of Gustav Robert Kirchhoff and Robert Wilhelm Bunsen was inaugurated in early October, and later the same month the Old Physics Building of the Eötvös Loránd University in Budapest was recognised. The last inauguration of 2018 became the Laboratorium in Bergara. This was the site where the Elhuyar brothers discovered Wolframium or Tungsten as it is called today in 1783. The Laboratorium today hosts a lot of outreach activities and besides many local authorities and residents of Bergara the event was also visited by participants of the 3rd EPS international conference on the history of physics that took place in Donostia – San Sebastián.

Until December 2018, 76 proposals of Historic Sites were received, either spontaneous or channelled through National Member Societies. Proposals can be made at any time from the EPS web site (link above). Of these proposals, 44 EPS Historic Sites have been inaugurated in 21 different countries at the end of 2018.

1. The Goldfish Fountain of the Physics Institute of Panisperna Street – *Centro Fermi*, Rome, Italy, 20 April 2012
2. Laboratory “Les Cosmiques”, Col du Midi, Chamonix, France, 23 July 2012
3. Hoza 69, Warsaw, Poland, 10 January 2013
4. The Study of Bruno Pontecorvo – JINR, Dubna, Russia, 22 February 2013
5. The Hill of Arcetri, Florence, Italy, 17 May 2013
6. The Villa Griffone in Pontecchio Marconi, Bologna, Italy, 26 May 2013
7. The Observatory of Tycho Brahe, Hven Island, Landskrona, Sweden, 11 September 2013
8. The LAL-LURE Accelerator Complex, Orsay, Paris, France, 13 September 2013
9. PTB, Formerly PTR, The National Metrology Institute, Berlin, Germany, 8 October 2013
10. The Cathedral, Kamien Pomorski, Poland, 11 October 2013
11. The Neutrino Experiment at MTA Atomki, Debrecen, Hungary, 25 October 2013
12. The Niels Bohr Institute, Copenhagen, Denmark, 3 December 2013

▼ Media and other participants attending the inauguration of the EPS HS Laboratorium in Bergara.



13. The AdA Storage Ring at the INFN Frascati National Laboratory, Frascati, Rome, Italy, 5 December 2013
14. The European Birthplace of the Atomic Timekeeping – NPL, Teddington, UK, 31 January 2014
15. The Blackett Laboratory, London, UK, 30 April 2014
16. The Fabra Observatory, Barcelona, Spain, 9 May 2014
17. The Study of Georgi Nadjakov, Sofia, Bulgaria, 23 May 2014
18. The Synchro-Cyclotron, SC – CERN, Geneva, Switzerland, 19 June 2014
19. The Kamerlingh Onnes Laboratory and Lorentz Institute, Leiden, The Netherlands, 9 February 2015
20. The Fisor Lutheran Secondary School, Budapest, Hungary, 23 April 2015
21. The Ludwig Maximilian University, Munich, Germany, 6 May 2015
22. The Students Residence (*Residencia de Estudiantes*), Madrid, Spain, 13 May 2015
23. The Mount Vesuvius Observatory, Hercolaneum, Naples, Italy, 23 May 2015
24. The Institute for Radium Research, Vienna, Austria, 28 May 2015
25. The Einstein House, Bern, Switzerland, as **Joint APS-EPS Historic Site**, 14 September 2015
26. The Hotel Metropole, Brussels, Belgium, 24 October 2015
27. The Ernst Mach Physics Institute, Prague, Czech Republic, 18 February 2016
28. The Cabinet of Physics of the University of Coimbra, Coimbra, Portugal, 11 March 2016
29. The Former Physical Institute of the University of Würzburg, Würzburg, Germany, 7 June 2016
30. The “Piersanti Mattarella Tower of Thought” of the Ettore Majorana Foundation and Centre for Scientific Culture, Erice, Italy, 21 August 2016
31. The Uddmanska House, Kungälv, Sweden, 29 October 2016
32. The Institute for Advanced Study, Princeton, NJ, USA, as **Joint APS-EPS Historic Site**, 9 November 2016
33. “Les Bastions” of the University of Geneva, Geneva, Switzerland, 29 March 2017
34. H.H. Wills Physics Laboratory (Royal Fort) of the University of Bristol, Bristol, UK, 13 September 2017
35. IBM Research Laboratory, Rüschlikon, Zürich, Switzerland, 26 September 2017
36. The Philips NatLab, Eindhoven, The Netherlands, 5 October 2017
37. The Curie Laboratory of the “Institut du Radium”, Paris, France, 7 November 2017
38. Magurele Physics Campus, Magurele, Romania, 15 November 2017
39. Institute of Spectroscopy, ISAN, Troitsk, Russia, 20 June 2018
40. Dunsink Observatory, Dublin, Ireland, 23 June 2018
41. Halde Observatory, Alta, Norway, 26 August 2018
42. Laboratories of Kirchhoff and Bunsen, Heidelberg, Germany, 1 October 2018
43. Old Physics Building of the Eötvös Loránd University, Budapest, Hungary, 12 October 2018
44. Laboratorio Bergara, Basque Country, Spain, 20 October 2018

The HS Committee was created at the end of 2011 by the EPS thanks to the insightful initiative of Luisa Cifarelli.

Members of the EPS HS Committee during first half of 2018 were: Luisa Cifarelli (Chair), Martin Huber, Maciek Kolwas, Ove Poulsen, Peter Maria Schuster and Fritz Wagner. Observers: Alan Chodos (representing the American Physical Society, APS) & Enrique Sanchez (EPS Young Minds). During the second half of 2018 the committee was renewed and consisted of: Luisa Cifarelli (Chair), Goran Djordjevic, Ursel Fantz, Alain Fontaine, Karl Grandin, Jim Hough and Fritz Wagner. Observers: Alan Chodos (APS) & Araceli Venegas Gomez (EPS Young Minds).

The HS Committee examines the proposals typically three times per year. A couple more sites are already approved and await inauguration in early 2019, and some more are being scrutinised by the EPS HS group.

For each inauguration event, a plaque is unveiled in the presence of the local representatives and authorities. The EPS President or his/her representative (Past President or Member of the EPS Executive Committee or Member of the EPS HS Committee) attends the ceremony. For each ceremony, a short report is published right away in the electronic newsletter e-EPS and on the EPS web site, and an extended article is published afterwards in *EPN*.

YOUNG MINDS

Chair: Roberta Caruso

Young Minds is an EPS project launched in 2010 with the aim of bringing together students and early career researchers in Physics and foster the excellence among them by encouraging the creation of local groups called sections and ensuring the possibility to access an annual budget to carry on student-led activities falling in three main categories: outreach, networking and professional development. Young Minds has now reached eight years of activity with 57 sections in 30 countries. Given these numbers, the focus of the program for 2018 has been to strengthen the links between the sections and between Young Minds and the EPS Divisions and Groups.

Project Management and Action Committee

In May 2018, the full Young Minds Action Committee, composed by EPS President Rüdiger Voss, EPS Secretary General David Lee, Executive Committee member Sylvie Jacquemot, EPS Conference manager Ophelia Fornari, Eva Salvador Balaguer (Spain), Araceli Venegas Gomez (UK), Roberta Caruso (Italy), Enrique Sanchez Bautista (Spain), Giorgio Nocerino (UK) and Imran Khan (Germany), elected Roberta Caruso as the new chair of the project. In November 2018, the Action Committee selected two new members, Richard Zeltner (Germany) and Daryna Pesina (Ukraine), to replace the former chair Eva Salvador Balaguer (Spain) and Enrique Sanchez Bautista (Spain). The new members have been selected among Young Minds members proposing their candidatures in an open call.

To ensure proper communication with the sections several actions have been undertaken. Since last year, each Action Committee member is directly in charge of the communications with a certain number of sections. To this extent, it is important that Action Committee members have a solid experience in section management. The table below shows the distribution of the sections among the Action Committee members.

ARACELI VENEGAS GOMEZ	IMRAN KHAN	DARYNA PESINA	RICHARD ZELTNER	GIORGIO NOCERINO
SCOPE (UK)	Konstanz (DE)	Kharkiv (UA)	Helsinki (FI)	Trieste (IT)
Durham (UK)	Erlangen (DE)	Kyiv (UA)	DTU (DK)	Catania (IT)
Imperial College London (UK)	OPG Wien (AT)	ICMP Lviv (UA)	Swedish YM (SE)	Cosenza (IT)
Queen Mary London (UK)	Delft (NL)	University of Warsaw (PL)	Lund (SE)	Messina (IT)
Madrid (ES)	Leiden RINO (NL)	Warsaw WUT (PL)	Malmö (SE)	Naples (IT)
ICFO (ES)	Antwerp (BE)	Wroclaw WrUT (PL)	Riga (LV)	Rome (IT)
GOC-Castellon (ES)	Liège (BE)	Minsk (BY)	Vilnius (LT)	Milan (IT)
Tenerife (ES)	EPFL Lausanne (CH)	Moscow Pedagogical State University (RU)	Tours (FR)	HUJI (IL)
USC Santiago (ES)	Zurich (CH)	ITMO St Petersburg (RU)	SCOP Paris (FR)	Cairo (ET)
Valladolid (ES)		Prague (CZ)	INFLPR - Bucharest (RO)	Bethlehem (PS)
Aveiro (PT)		Zagreb (HR)	Budapest (HU)	Yerevan (ARM)
Beni Mellal (MA)		Skopje (MK)	Debrecen (HU)	Artsakh (ARM)

To ensure continuity when Action Committee members are replaced, a Customer Relationship Management platform has been introduced, while the document storage is currently done using standard cloud platforms. The Action Committee is working to find a comprehensive and affordable solution to manage the sections and all the related issues.

The Action Committee met in May 2018 in Prague, right before the Leadership Meeting, and in Trieste in November 2018, hosted by the local Young Minds section. During both meetings there were special feedback sessions with the sections, to discuss issues and strengths of the Young Minds project from their perspective.

Further, following the Leadership Meeting in Prague, the Action Committee started to develop a strategy to increase the visibility of the project as a whole and the sections and their activities in social media. As a first measure, a number of guidelines for the efficient presentation of the EPS YM Project were established and forwarded to the sections.

Section Development

In 2018 the Young Minds project established 8 new sections, 3 of them in countries that were not represented in the project yet (Armenia, Macedonia, Israel), for a total of 57 sections in 30 countries. Each section is entitled to apply for a maximum of 1000€ for funding to support activities falling in at least one of

the three categories: outreach, networking and professional development. There are two deadlines per year – January 15th and July 15th. The table below summarises the number of activity grant requests, the number of activity grants approved, the total amount of funding requested, and the total amount of funding granted for each deadline.

Young Minds and EPS

The organisation of Young Minds sessions during EPS sponsored and recognised conferences started in 2018 to increase the synergy between Young Minds and other EPS Divisions and Groups. The first session, devoted to outreach and career opportunities, was organised in March during Joint EPS CMD27-DPG Spring meeting in Berlin. After the presentation of the initiative during the Executive Committee meeting in London in November, other sessions are foreseen in 2019. Young Minds has been presented also during EPL Board meeting in Lyon in June.

Young Minds also regularly publishes in e-EPS, the online magazine of EPS.

The representative of Young Minds sitting in the Historic Sites Committee and in the Equal Opportunity Committee has changed. Currently, Araceli Venegas Gomez sits in the former and Giorgio Nocerino in the latter.

Young Minds was part of the EPS50 celebrations in Geneva in September, with an exhibit of posters collecting the activities

from all sections in 2018, and contributions to the EPS50 photo-contest. Moreover, 10 Young Minds members supported the EPS staff in organising the ceremony on-site and further attended the celebrations.

7th Leadership Meeting

Every year, one representative per section is invited to attend the Leadership Meeting, an event where the representatives can present and discuss their sections' activities. The 2018 Leadership Meeting was organised at the Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University in Prague, by the local YM section. The meeting started with an overview of the project given by the Action Committee, followed by talks of the invited representatives outlining their section's activities. The local invited speakers were Dr. Jana Bielčíková and Prof. Igor Jex, while EPL Editor-in-chief Bart Van Tiggelen presented the journal and gave an overview of the current problems of the editorial world. The best activity award, sponsored by EPL, was awarded to the Kharkiv YM Section for their '2017 IEEE International Young Scientists Forum on Applied Physics and Engineering (YSF-2017)'. The second prize was awarded to Trieste YM Section for their 'Science concert'. Besides the Action Committee, the invited speakers and the local representatives, the meeting was attended by 31 section representatives and 13 local section members.

	REQUESTS	APPROVED WITH FULL AMOUNT	APPROVED WITH REDUCED AMOUNT	TOTAL AMOUNT REQUESTED	TOTAL AMOUNT GRANTED
JANUARY 15 th DEADLINE	41	26 (63%)	15 (36%)	18883.30	12105.00
JULY 15 th DEADLINE	32	18 (56%)	12 (37.5%)	13668.30	9738.00

EPL



Editor in Chief:
Bart van Tiggelen

Executive Editor:
Iain Trotter

Staff Editor :
Frédéric Burr

The year 2018 started with 2 newly appointed Deputy Editors, 21 newly appointed Co-Editors, and finally a new Editor-in-Chief with Prof. Giorgio Benedek having come to the end of his term.

Editorial Board

As of March 2018, our Editorial Board comprises 67 Co-Editors. Co-Editors have been appointed in all disciplines of physics, they are to cover at least the countries important for EPL, such as EC, India, China and the US. They can be either confirmed physicists or young rising stars. A real effort is made to have more female scientists on board, and to appoint Co-Editors on rising themes such as quantum information, machine learning and complexity. The Editorial Office in Mulhouse sends out on average 3.8 requests per submission, generating 1.95 reviews. The last number demonstrates a good performance of the Editorial Board, yet 50 % of the requests does not produce a report. A Co-Editor handles on average

20 manuscripts per year. This is a reasonable workload but note that some Co-Editors in statistical physics, quantum information, complexity and cosmology handle more than 40 each year. The Board of Directors has approved a gift of a transparent EPL Pyramid to all current and some former Editorial Board members for service to EPL. A very successful Editorial Board meeting was organised on June 7, 2018 at the ENS Lyon that gathered 33 editorial board members from all over the world, as well as the entire Board of Directors and Management Committee. We hope to organise this event every three years.

Bibliometrics

During the year 2018, EPL received 1327 submissions, against 1563 in 2017. Almost 50 % of the submissions comes from Asia (China, India). The number of submissions is declining and this is a real worry. This is mainly due to declining number of submissions from EC countries (219 from EC in 2018 against 309 in 2017, the countries inside EC submitting most to EPL being France, Germany, Italy and UK). We hope that the newly appointed Co-Editors can prevent worse. The reason is undoubtedly that a few years ago the impact factor went down below the symbolic 2.0 barrier (1.957 early 2017, 1.834 early 2018) and EPL is now ranked in the second quartile Q2 of Journal Rankings in Physics and Astronomy (SJR). For many

potential authors such “second-rank” position prevents them from submitting to EPL, not rarely discouraged by their funding agencies. EPL still suffers from too many “Sleeping Beauties”, *i.e.* zero-cited papers that are potentially interesting but apparently not visible. With 478 papers published in 2018, our acceptance rate remains constant around a satisfactory 60 %.

After the sharp increase (8%) in usage seen in 2017, the total number of downloads for 2018 has stabilised at around 614,000. Although this total is still higher than any year in the decade before 2017, we have again seen an increase in the share of downloads to the EPL article archive (articles published before 2018) – with just 11% of the usage in 2018 being to current year content. Nevertheless, that is more than 140 downloads on average for an EPL manuscript published in 2018, up from 123 in 2017. Editor’s Choice articles, of which 48 were published in 2018, received on average no less than 376 downloads per article, which is indicative of the high quality of these articles selected by Co-Editors. The six Perspective articles published in 2018 issues have brought in a total of 4,851 downloads and 29 citations by the end of December 2018. The programme has seen increased commissioning attention from the Editor in Chief and especially both Deputy Editors, Prof. Roberta Citro (Salerno) and Prof. Gonzalo Muga (Bilbao) in 2018, which should result in a marked increase in the number of Perspectives published in the 2019 Volumes.

China and the USA remain the highest downloaders of EPL content, with 15% and 14% respectively of all downloads coming from those countries. After them, there is a big gap to the next biggest consumers, with Germany at 7%; India, Japan and UK all representing 4%, and France 3% of all downloads. Given the continued growth of research output from Asia, it is encouraging to report that Tokyo University and China University of Science and Technology are again the top two highest downloading institutions. It is also notable that CERN reappeared as the third highest user, after its absence in the download top 10 of 2017.



Editorial Process

A strong element of EPL is the quality and efficiency of the entire editorial process, 80 days from submission to acceptance and only 26 days more to get the accepted paper on-line. Most “lost” time is due to reviewer requests with no reply. The editorial process, from submission to production, requires a continuous exchange between the four offices in Mulhouse, Bologna, Bristol and Les Ulis.

EPL Support

EPL has sponsored 15 scientific events (poster prize, umbrellas, young physicist prize), some of them were EPS labelled events, with EPL visibility and with active participation of either Editor-in-Chief or Deputy Editor. In particular, EPL sponsored the prestigious EPS CMD Europhysics Prize, awarded this year in Berlin to Lucio Braicovich and Giacomo Ghiringhelli for their development and scientific exploration of high-resolution inelastic X-ray scattering (RIXS). EPL sponsored the Young Minds Best Activity Award, attributed during the 7th Young Minds Leadership Meeting in Prague.

Invited Papers

The initiative of the former Editor-in-Chief to launch each year typically 2 Focus Issues on hot topics and a number of perspective papers, all upon invitation, has been pursued. In 2018 EPL has published a Focus Issue on *Evolutionary Modeling and Experimental Evolution*, edited by 2 Co-Editors and 1 Guest Editor, and currently a Focus Issue on the *Physics of Quantum Engineering and Quantum Information is open*, edited by Deputy Editors and Editor-in-Chief. EPL published 6 Perspective papers (non-Hermitian optics, active colloidal molecules, solitons with spin-orbit coupling, thermodynamics of kappa distributions, quantum walks and neural information processing). There is a real difficulty to persuade recognised scientists to respond to our invitation. These invited research papers are generally well cited (see above), but unfortunately, too few exist to make a real difference in the impact factor.

Interaction with EPS Divisions and Groups

EPS President and EPS Executive Council recommended EPL to look out for more interaction with the scientific Divisions and Groups of the EPS. We must persuade EPS Divisions and Groups that EPL is their physics journal, and that we want to have more submissions from European countries. We have started interacting with the Divisions and Groups to get propositions for Co-Editors or events to support. Unfortunately, little feedback has been received. EPL hopes to count on EPS to help to make this interaction improve.

Marketing & Promotion

In 2018 we undertook a major market research project to better understand our customers' perceptions of EPL. For the purposes of the research we defined customers as publishing researchers, both those who have published with EPL and those who have published with EPL's competitors.

The research drew attention to the fact that the journal has settled into a position behind its original goal of matching Physics Review Letters (PRL), with only 1.5% of the market naming EPL first as a publishing option, against 25% naming PRL first. Further investigations revealed that the community did not feel that the journal has a strong enough Editorial Board to compete with the APS titles, and also that the journal was perceived to be underperforming in comparison to its competitors in terms of capturing high profile authors, publishing important research, and the size of its readership.

Work has already been started in 2018 to formulate a new vision statement that should provide the journal a new focus for future strategy decisions, based upon the outcome of the market research project.

- Key campaign activity in 2018 consisted of the following:
- Highlights campaign
- Referee gift
- Focus issue promotion
- Premium content promotion

The Highlights campaign is the largest campaign of the year. As well as initial notifications when the collection went live,

we also served Gmail adverts for several months to promote the page. The adverts were seen nearly 200,000 times. A printed brochure was produced to distribute to conferences worldwide – so far it has been sent to nearly 40 conferences.

To support the new Focus Issue programme, emails campaigns were sent to relevant contacts from EPL and the IOPP database. We also sent out an email to promote our ‘premium’ content, as an example of the high-quality work that EPL publishes. In total, over 16,000 emails were sent on behalf of EPL.

The Editorial Office continues to run the Twitter account for EPL, promoting recent articles and engaging with the community. Headline figures are as follows: 501 tweets in 2018 with a total of 3,615 engagements. Followers have grown by 30% to 720 at time of writing.

Future challenges

A new production contract will become effective in 2019 between the 4 Publishing Partners: EPS, SIF, IOPP and EDP Sciences/SFP. A new Executive Editor in charge of EPL, Dr. Anne Ruimy, has been appointed at EDP Sciences, and the production desk in Bologna will aim to become more efficient. All sales of EPL, including the stand-alone subscriptions, will be gradually taken over by IOPP.

For 2019, a number of challenges exist. Especially, with the Plan S issued in 2018, the challenge for EPL to respond to Open Access becomes more urgent than ever. Today, EPL is a hybrid journal with only very few Open Access papers (9 in 2018). This economic model is not compatible with the conditions imposed by Plan S that insists, in a nutshell, on *immediate* open access *free for all* readers.

Concerning the evolution of the Editorial Board, 2 very active Co-Editors have arrived at the end of their 7-year term, 10 reach the end of their 5-year term, and 14 reach the end of their 3-year term. We have found 12 new Co-Editors (7 women, 5 men), and 15 agreed to stay on board. We are still looking out for a new Co-Editor in experimental particle physics, and await a proposition made by the HEP Division.

EUROPEAN JOURNAL OF PHYSICS (EJP)



Editor in Chief:
Michael Vollmer

Associate publisher
IOP Publishing:
Iain Trotter

Executive summary

IOP Publishing is pleased to report to the council another very successful year in 2018 for European Journal of Physics (EJP). Capitalising on the solid foundations of an established Publishing team and external Editorial Board, the journal is delivering on its dual aims of supporting the growing field of physics education research and providing valuable resources for in-service educators – actively helping to foster improved collaboration where these two facets meet. With a stable publishing operations team, we are continuing to improve our already excellent customer service and competitor-beating processing times – through the careful application of Continuous improvement practices to both technology and processes. From this firm foundation, we have continued to raise our profile in the strategically important US community, whilst maintaining our traditionally strong position in Western Europe and engaging directly for the first time with the thriving physics education scene in Australia. IOP Publishing is also delighted to report a substantial increase in the financial contribution to the European Physical Society, to €112,442.

Editorial activity

The editorial board continues to offer invaluable support to the journal; whether acting as Guest Editors for focus issues, contributing and commissioning high quality content, and promoting the journal at events. Despite not formally adding to the editorial board in 2018, we have several key figures from the community lined up and expect to make significant progress in 2019 towards improving the geographic spread and diversity of the board.

EJP added 5 further articles to its well-received Reviews programme in 2018, expanding our coverage in key areas such as materials science, cosmology and electromagnetism. 2018 also saw the maturity of two key editions of our focus issue series, which help to illustrate two different aspects in which the journal provides support and value to the physics education community. Acknowledging the importance of the field of Physics Education Research, and its place as a legitimate area of primary research within physics, the first articles in the PER-based issue ‘Focus on Modeling in Physics Instruction’ were published, and further commissioned perspectives from leading researchers in the field appearing throughout the rest of 2019. The second issue, ‘Focus on Complexity’, highlights the interdisciplinary nature of modern physics and presents pedagogical introductions to cutting-edge research and ideas which are yet to appear in textbooks. In 2018 this series featured pieces on the physics of diverse areas such as dynamics in biology, economics, democracies and composite materials. 2019 will see the publication of the first articles to the ‘Focus on Medical Physics’, the very first joint focus

issue shared with *Physics Education* – enabling contributors to cover a range of student ages and technicality in this vital real-world application of physics principles.

The continued strong performance of the journal is illustrated in the submissions and acceptance figures for 2018. After the large jump in submissions from 2016-17, 2018 has seen (remarkable) stability – with the exact total number of submissions as the previous year. We have also seen the journal settling into a higher number of accepted articles, after a peak in 2016, although the absolute number was slightly lower. EJP is capitalising on a raised profile within the international education community, vindicating the established policies of proactive marketing and community engagement. The EJP publishing team continues to work hard to preserve the journal’s strong reputation and has been able to take advantage of department-wide ‘Continuous Improvement’ measures in both technology and processes. These have meant that EJP can provide consistently quicker peer-review processing and production turnaround than its direct competitors, whilst maintaining an excellent level of personal customer service.

Article download figures show another significant increase (25%) on last year, with again a greater number of highly downloaded articles contributing to the total rather than a few exceptional cases. We feel that this continues to validate our marketing approach of mixing tailored direct contact and daily social media interaction with an engaged audience. **In 2018: 66,279 Downloads of 2018 EJP content and 368,883 Total Downloads of all EJP content.**

Article Type	SUBMISSIONS (BY RECEIVED YEAR)						ACCEPTANCES (BY FINAL DECISION YEAR)					
	2013	2014	2015	2016	2017	2018	2013	2014	2015	2016	2017	2018
Papers	712	731	663	651	767	782	146	143	196	224	206	200
Letters	42	33	40	26	15	17	6	4	13	2	0	0
Reviews			15	19	21	10			2	3	7	4
Special Issue /Focus on	13	9	12	34	14	18	13	4	3	20	14	19
Other	11	12	14	31	29	19	7	5	9	19	15	14
Total	778	785	744	761	846	846	172	156	223	268	242	237

EJP materials were sent to the following events this year:

ARTICLE TITLE	VOLUME	ISSUE	ONLINE DATE	DOWNLOADS
Phys FilmMakers: teaching science students how to make YouTube-style videos	39	1	19/12/2017	2,150
The variational method in quantum mechanics: an elementary introduction	39	3	13/04/2018	2,043
Do students benefit from drawing productive diagrams themselves while solving introductory physics problems? The case of two electrostatics problems	39	1	13/12/2017	1,969
An open source virtual laboratory for the Schrödinger equation	39	5	29/06/2018	1,967
Clarifying concepts and gaining a deeper understanding of ideal transformers	39	3	09/04/2018	1,857
A simple model for the falling cat problem	39	3	28/03/2018	1,725
High-speed sailing	39	4	08/05/2018	1,627
Do evidence-based active-engagement courses reduce the gender gap in introductory physics?	39	2	17/01/2018	1,576
Investigating and improving introductory physics students' understanding of symmetry and Gauss's law	39	1	07/12/2017	1,424
Investigating and improving student understanding of quantum mechanical observables and their corresponding operators in Dirac notation	39	1	22/12/2017	1,195

Marketing activity

2017 Highlights campaign

Our annual Highlights collection was made available in March. This popular campaign of outstanding papers from the previous year were once again highly received by researchers. All articles in the collection were made free to read online until the end of the year and promoted via email to all IOPP

Education contacts to help encourage usage and citation of this quality content. In addition to this, certificates were created and sent to the featured authors in PDF format, to encourage them to submit future work to the journal.

The Highlights can be found online at: <http://iopscience.iop.org/journal/0143-0807/page/Highlights-of-2017>

Advertising (online and print)

Throughout the year we have also created adverts to be posted online *i.e.* Physics World, as well as in print as a delegate insert for workshops and other events.

AAPT Summer Meeting

Featuring our new 'Education' subject collection design header.

This year we provided an email to be the organisers of AAPT. This was sent to all delegates attending the event 1 week prior. This provided us with an opportunity to promote 'Meet the Editors' as well as provide details of our location/booth.

The AAPT mailshot can be found online at <http://comms.iop.org/q/119z4hEfsV3w/wv>

Conferences and events in 2018

In engaging with the community and interacting with target authors, we can maintain relationships, build confidence in researchers, and work on improving the journal profile. This interaction with the community is vital and plays a major role in our marketing plans and activities.

In conclusion

From the solid base of a high functioning publishing team, the European Journal of Physics is capitalising on the steady growth and raised profile over the previous few years. With support from a committed editorial board, and clear development goals, we will be able to increase the impact of our quality, commissioned content by building awareness and driving usage in strategic areas.

EVENT	DATE	LOCATION	PRESENCE
AAPT Winter Meeting 2018	6 Jan – 9 Jan	United States	Editorial Staff/ Editor-in-Chief / Board Members
GIREP-MPTL 2018	9 Jul – 13 Jul	Spain	Editorial Staff / Board Members
AAPT Summer Meeting / PERC 2018	28 Jul – 1 Aug	United States	Editorial Staff/ Marketing / Board Members
Physics Higher Education Conference	23 Aug – 24 Aug	United Kingdom	Editorial Staff
ICPE-SAIP-WITS 2018	1 Oct – 5 Oct	South Africa	Board Members
AIP Congress 2018*	9 Dec – 13 Dec	Australia	Editorial Staff

*IOP Publishing sponsored a 'High Tea' event at the AIP Congress, organised by the Physics Education Group of the Australian Institute of Physics. EJP was featured prominently in marketing and advertising for the event, and it was a great opportunity to highlight the journal and demonstrate our engagement to this key geographical subset of the education community.

E-EPS

Editor: A. Bracco - Technical Editor : G. Gunaratnam

Overview since the creation in May 2011

	WEBSITE VISITS	SUBSCRIBERS	ARTICLES PUBLISHED	COMMENTS
2011	32031	1	160 ²	15
2012	63530	38160	244	44
2013	75370	35433	240	53
2014	73934	35732	209	91
2015	68009	33501	216	7
2016	59876	33471	206	7 ³
2017	57616	33448	213	0
2018	52446	33286 ⁴	213	0

¹ unknown statistics ² newsletter started in May 2011

³ comments deactivated in September 2016

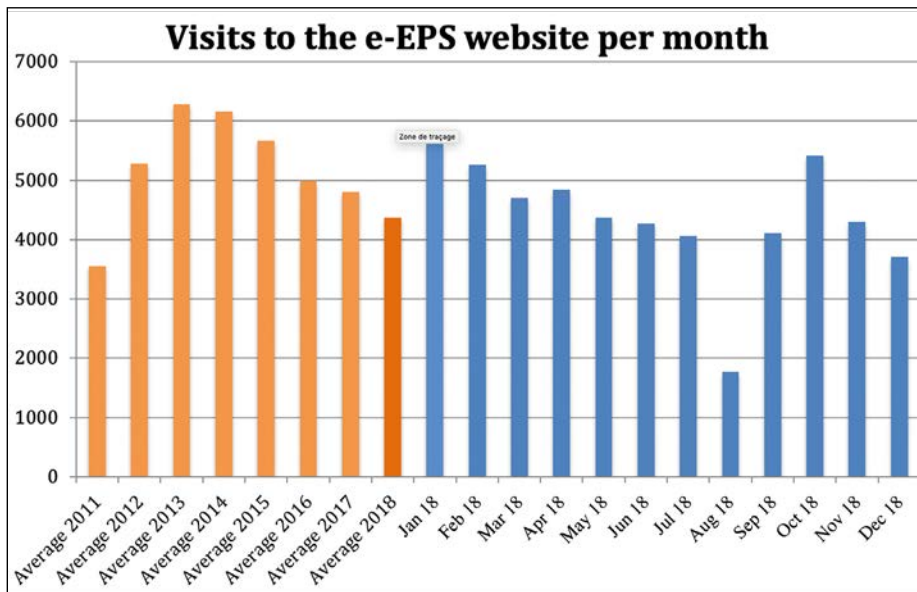
⁴ Since May 2018 and GDPR new EPS IMs are not added to the subscribers

No issue in August 2018

MONTH	VISITS OF THE E-EPS WEBSITE PER MONTH
Average 2011	3559
Average 2012	5278
Average 2013	6281
Average 2014	6161
Average 2015	5667
Average 2016	4990
Average 2017	4801
Average 2018	4371
Jan-18	5619
Feb-18	5262
Mar-18	4705
Apr-18	4842
May-18	4377
June-18	4275
July-18	4067
Aug-18	1771
Sept-18	4103
Oct-18	5420
Nov-18	4299
Dec-18	3706



Statistics of the 2018 issues



Most read articles in 2018 (>600 visits)

TITLE	VIEWS
The Nobel Prize in Physics 2018	764
Editorial – Scanning Khufu's Pyramid with atmospheric muons	754
Editorial: EPWS, the voice of European Women Scientists	734
Editorial: A strong passion for science	714
EPS Emmy Noether Distinction for Women in Physics Winter 2017	645
2018 Lise Meitner Prize for Nuclear Science	624

Conferences Organised in 2018

CONFERENCE	PLACE	PARTICIPANTS	DIVISION/GROUP
EGAS50	Krakow, Poland	220	Atomic, Molecular and Optical Physics
CMD27 (with the DPG CMD)	Berlin, Germany	7000	Condensed Matter Division
ECOSS-34	Aarhus, The Netherlands	530	Condensed Matter Division
EST Science Meeting	Giardini Naxos, Italy	80	European Solar Physics Division
3 rd International Conference of the HOP	San Sebastian, Spain	70	History of Physics Division
EUNPC	Bologna, Italy	250	Nuclear Physics Division
GIREP-MPTL	San Sebastian, Spain	280	Physics Education Division
45 th EPS Conference on Plasma Physics	Prague, Czech Republic	850	Plasma Physics Division
EUROPHOTON	Barcelona, Spain	220	Quantum Electronics and Optics
UP2018	Hamburg, Germany	525	Quantum Electronics and Optics
Experimental Chaos and Complexity Conference	Madrid, Spain	200	Statistical & Nonlinear Physics Division
New Trends in Nonequilibrium Statistical Mechanics: Classical and Quantum Systems	Erice, Italy	80	Statistical & Nonlinear Physics Division
Dynamics Days Europe	Loughborough	250	Statistical & Nonlinear Physics Division
Small Complex Systems Conference	Venice, Italy	80	Statistical & Nonlinear Physics Division
Joint session with CMD: DPG spring meeting CMD27	Berlin, Germany	7000	Statistical & Nonlinear Physics Division
Joint session with PPD: 45 th EPS Plasma Physics conference	Prague, Czech Republic	850	Statistical & Nonlinear Physics Division
IPAC	Vancouver, Canada	1411	Accelerator Group

Prizes Awarded in 2018

PRIZE	LAUREATE	DIVISION
EPS CMD Europhysics Prize	Lucio Braicovich, Italy Giacomo Claudio Ghiringhelli, Italy	Condensed Matter Division
2018: Early Career Researcher	Tanausú del Pino Alemán, Spain	European Solar Physics Division
PhD Thesis Prize	Peter Levens, United Kingdom	European Solar Physics Division
PhysicsEtoire	Dr Jim Bennett, United Kingdom	History of Physics
Lise Meitner Prize 2018	Peter Ring, Germany and Peter Schuck, France	Nuclear Physics Division
Poster Prize	Flávia Polati, Brazil	Physics Education Division
Alfvén Prize	Tony Bell, United Kingdom	Plasma Physics Division
Landau-Spitzer Award	Yevgen Kazakov, Belgium Jozef Ongena, Belgium John. C. Wright, USA Stephen J. Wukitch, USA	Plasma Physics Division
Innovation Award	Arutin Ehasarian, United Kingdom	Plasma Physics Division
PhD Research Award	Matteo Falessi, Italy	Plasma Physics Division
Poster Prizes	Javier Rodrigo Pinzón Acosta, Germany Viktor Schneider, Germany Meenakshi Sharma, India Petr Valenta, Czech Republic	Plasma Physics Division
Kyushu University Itoh Project Prize	Alexander Creely, USA	Plasma Physics Division
2018 Research in Laser Science and Applications Prize	Dwayne Miller, Germany	Quantum Optics & Optics Division
4 th Prize for Research into the Science of Light	J. Garcia de Abajo, Spain	Quantum Optics & Optics Division

Atomic Molecular and Optical Physics Division



Chair: Joachim Burgdörfer

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 Conference (EGAS)

Prizes

- EPS Young Scientist Prize in Atomic Molecular and Optical Physics

Website

- www.eps.org/eps-amopd

Gravitational Physics Division



Chair

- Mairi Sakellariadou

Conference

- EPS Conference on Gravitation

Prizes

- No Prize so far

Website

- www.eps.org/group/GPD

Condensed Matter Division



Chair: Kees van de Beek

Sections

- Liquids, Macromolecular Physics, Magnetism, Structural and Dynamical Properties of Solids
- Semiconductors and Insulators, Surfaces and Interfaces

Conferences

- Liquid Matter Conference
- Ultra-Low Temperatures
- ECOSS 33

Prize

- EPS CMD Europhysics Prize
- Liquid Matter Prize
- Young Researchers Prize

Website

- www.eps.org/eps-CMD

High Energy And Particle Physics Division



Chair

- Barbara Erazmus

Conference

- HEP General Conference

Prizes

- High Energy and Particle Physics Prize
- Young experimental Physicist Prize
- Gribov Medal
- Outreach Prize
- Giuseppe and Vanna Cocconi Prize

Website

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

Environmental Physics Division



Chair: Herbert Fischer

Conferences

- Common EGU/EPS session at the EGU General Assembly

Prize

- In the area "Environmental Physics" a large number of international prizes are awarded regularly. As a consequence, a sponsor for a new prize could not be found up to now

Website

- www.eps.org/group/EPD

Nuclear Physics Division



Chair

- Nicola Bianchi

Conferences

- EPS Nuclear Physics Division Conference
- Nuclear Physics in Astrophysics

Prizes

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

Website

- <http://www.eps.org/group/NPD>

More about EPS divisions:
http://www.eps.org/members/group_select.asp?type=8719

Plasma Physics Division



Chair

- Richard Dendy

Sections

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

Conference

- EPS Plasma Physics Division Conference

Prizes

- EPS-PPD Hannes Alfvén Prize
- EPS-PPD PhD Research Award
- EPS-PPD Innovation Prize
- EPS-IUPAP Student Poster Prize

Website

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

Quantum Electronics And Optics Division



Chair

- Giulio Cerullo

Conferences

- CLEO/Europe – EQEC
- Europhoton
- Ultra-fast Phenomenon

Prizes

- EPS Quantum Electronics Prize
- Fresnel Prize
- 4 QEOD Thesis Prizes
- Research in Laser Science and Applications Prizes
- Travel grants Student Awards

Website

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

Physics Education Division



Chair

- David Sands

Conference

- European Physics Education Conference (GIREP-EPEC)

Prize

- EPS PED Secondary Teaching Award
- EPEC Best Poster Prize

Website

- www.eps.org/group/PED

Solar Physics Division



Chair

- Eduard Kontar

The JSPD is a joint Division with the European Astronomical Society (EAS) and the European Physical Society (EPS)

Conference

- European Solar Physics Conference

Prizes

- Senior Prize for distinguished, world-renowned solar physicists
- Young Scientist / Postdoc Prize
- PhD Student Prize

Website

- www.eps.org/group/ESPD

Physics in Life Sciences Division



Chair

- Felix Ritort

Conference

- Biology for Physics Conference

Conference

- DPL Young prize
- Poster Prize

Website

- www.eps.org/group/DPL

Statistical And Nonlinear Physics Division



Chair

- Christian Beck

Conferences

- Crossroads in Complex Systems
- Dynamics Days
- Sigma-Phi conference
- EPS Statistical and Nonlinear Physics conference

Prizes

- Award of the Statistical and Nonlinear Physics prize
- Early career prize

Website

- www.eps.org/group/SNPD

More about EPS divisions:
http://www.eps.org/members/group_select.asp?type=8719



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