



Schweizerische Physikalische Gesellschaft

Société Suisse de Physique

Swiss Physical Society

Generalversammlung 2019 - Assemblée Générale 2019

Dienstag 27. August 2019, 11:30h - Mardi 27 août 2019, 11:30h

Hörsaal G 30 - Auditoire G 30

Traktanden

1. Protokoll der Generalversammlung vom 28. August 2018
2. Bericht des Präsidenten
3. Projekte
4. Rechnung 2018, Revisorenbericht
5. Wahlen
6. Diverses

Ordre du jour

- Procès-verbal de l'assemblée générale du 28 août 2018
- Rapport du président
- Projets
- Bilan 2018, rapport des vérificateurs des comptes
- Elections
- Divers



Protocol of the General Assembly 2017

Full text available at the SPG Mitteilungen No 58, p. 6

<https://www.sps.ch/fileadmin/doc/Mitteilungen/Mitteilungen.58.pdf>

Protokoll der Generalversammlung vom 28. August 2018 in Lausanne Protocole de l'assemblée générale du 28 août 2018 à Lausanne

Agenda

1. Approval of the Minutes of the General Assembly held at CERN, Geneva on 22 August 2017
2. Brief Report from the President
3. Projects
4. 2017 Finances and Auditors Report
5. Elections
6. New honorary member
7. Miscellaneous

The president opens the general assembly at 18:00.

1. Approval of the Minutes of the General Assembly held at CERN, Geneva on 22 August 2017

The protocol of the last General Assembly, published in the *SPG Mitteilungen* Nr. 55 on p. 7 is unanimously approved.

2. Brief Report from the President

The President welcomes the 63 new members to the Society, which now counts 1148 members, thereof 18 honorary members and 24 associate members. With 68 members leaving, this marks again a slight decrease with respect to last year's count. The President states that the Society is healthy and active with many projects and activities going on. However, the Society can do more and be more effective with broader support and with more members participating.

3. Projects

The President then reports on the main goals of the Society and the activities organized and/or supported in 2017. Besides the organization of the main annual event, the Society is organizing smaller, regional seminars and symposia, often together with the help of regionally embedded associations. Examples are the Joseph Fourier Symposium (together with PGZ) or the Jost Bürgi Symposium (together with the Jost Bürgi foundation, VSMP and SAG).

Promoting the youth is important for the Society, which it does via sponsoring various events targeted to young talents like the *Swiss Physics Olympiad*, the *Swiss Young Physicists' Tournament*, the *International Physicists' Tournament*, etc. Further by supporting the *Swiss Young Physicists Forum*, the *EPS Young Minds*, and without forgetting the very young where the *Physics in Advent* is exemplary for inspiring and raising interest of the next generation.

The Society is further promoting individual physicists by giving awards to young and gifted minds. Six young physicists are awarded this year with SPS Prizes sponsored by ABB, IBM, Oerlikon Surface Solutions, METAS, and COMSOL, respectively.

Confirmed physicists are awarded with the *Charpak-Ritz Prize* which is bestowed jointly by the French Physical Society and the Swiss Physical Society. In 2018, the Charpak-Ritz award was given to Roland Horisberger.

IBM Rüslikon has been selected as EPS Historical site. The inauguration and the unveiling of the commemorative plaque took place on 26 September 2017, which is reported on page 53 of the *SPG Mitteilungen* Nr. 53. A fourth EPS historical site in Switzerland has been announced to be the High Altitude Research Station Jungfrauoch, where the ceremony will take place on February 8, 2019.

The Physics and Society brochure, reporting on the importance of physics to the Swiss economy, innovation and society is a study that is sponsored by SCNAT and commissioned by the Swiss Physical Society. The study is well underway and results shall be published by the end of the year.

The Society is informing its members with its journal, with three issues annually and the monthly newsletter, which has become well-established within only one year of its existence.

4. 2017 Finances and Auditors Report

The 2017 annual financial report is presented by the treasurer, Dr. Pascal Ruffieux (see page 9 of the *SPG Mitteilungen* Nr. 55). Prof. Dr. Philipp Aebi and Dr. Pierangelo Gröning, the auditors of this report, have approved the numbers and their statement can be found on page 10.

A loss of 3'325.75 Swiss Francs is accounted for. The treasurer explains that the benefits or losses depend mostly on the success of our annual meetings. In our 2017 annual meeting at CERN and Geneva, we had higher costs that could not easily be recovered without asking for higher participation fees. We wanted to avoid a raising of the fee as much as possible.

The annual financial report is approved unanimously by the General Assembly which gives discharge to the Board.

5. Elections

The President thanks the members of the committee who have reached the end of their term and, according to our statutes, cannot be re-elected, namely: Minh Quang Tran (Vice-president), Antoine Pochelon (Secretary), Pascal Ruffieux (Treasurer), Jan Lacki (History of Physics), Gian Michele Graf (Theoretical Physics), Stéphane Goyette (Earth, Atmosphere and Environmental physics), Stephan Brunner (Applied Physics).

P. Paruch (KOND) resigned already on 6 September 2017.

The following committee members have reached the end of their current mandate, can be re-elected for a further term according to our statutes, and are re-elected unanimously by the General Assembly:

- Giovanni Dietler (Biophysics, Medical Physics and Soft Matter)
- Laura Heyderman (KOND)
- Céline Lichtensteiger (Education and Promotion of Physics)
- Andreas Schopper (TASK)
- Pierangelo Gröning (Auditor)

With Prof. Dr. Claus Beisbart being proposed to chair the section 'History of Physics' it is also proposed that the section shall undergo a broadening of its scope and will from now on be named '*History and Philosophy of Physics*'. This new section name is unanimously endorsed by the General Assembly.

The following persons are elected unanimously by the General Assembly (* = 1 vote against):

- Vice-president: Dr. Bernhard Braunecker (for 1 year)
- Secretary: Dr. Lukas Gallmann (for 2 years)
- Treasurer: Dr. Dirk Hegemann (for 2 years)
- KOND: Prof. Dr. Henrik Rønnow (for 2 years)
- Applied Physics: Prof. Dr. Lenny Rivkin (for 2 years) and Dr. Laurie Porte (for 2 years)
- Theoretical Physics: Prof. Dr. Philippe Jetzer (for 2 years)
- Education and Promotion of Physics: Prof. Dr. Andreas Müller (for 2 years)
- History and Philosophy of Physics: Prof. Dr. Claus Beisbart* (for 2 years)

No successor could be identified for Stephane Goyette, who is chairing the Earth, Atmosphere and Environmental Physics section. Experts in the field have been contacted at ETHZ, EPFL, University of Bern, etc., but have been reluctant to commit themselves. The main reason is that these people are engaging already in many associations, expert bodies, discussion groups, or in other more interdisciplinary learned societies, e.g. ProClim, etc.

The General Assembly agrees to prolongate Stephane Goyette's mandate for one year allowing to find a successor.

6. New honorary member

The General Assembly agrees unanimously to bestow Prof. Maurice Bourquin the title of Honorary Member of the SPS in recognition of his enormous scientific achievements in particle and astroparticle physics, for his extraordinary commitment in the science policy at CERN and at Swiss universities implementing the Bologna Reform, and also for his far-sighted commitment to the promotion of future thorium based nuclear reactors, which have increased efficiency and produce less long-lived waste.

7. Varia

The President states that the Swiss Physical Society is a 'learned society' with goals and interests to link and interlink physicists in Switzerland and beyond. He stresses that physicists are: professionals, teachers, undergraduate and graduate students, postdocs who are directly active in physics in academia, at research institutes, in industry, at schools, or anyone with a deeper interest in physics.

The President also repeats a statement he made in the *SPG Mitteilungen* Nr. 55:

The strength of the Society is the uniting of people and it is the annual membership fee that together keep SPS going strong. Paraphrasing a well-known quote, the answer therefore is not so much of what is the Society doing for you, but of what you can do as an individual for the good of the Society, and thus for the good of the activities SPS is running, supporting, and enabling.

The President closes the meeting at 18:55.



Report by the President

See also SPG Mitteilungen No 58, p. 8

<https://www.sps.ch/fileadmin/doc/Mitteilungen/Mitteilungen.58.pdf>

□ **Created in 1908**

- Collective member of:
 - Swiss Academy of Sciences (SCNAT) part of A+
 - Swiss Academy of Technical Sciences (SATW)
 - European Physical Society (EPS)

□ **1141 members** (+60 new members / -67 members left in 2018)

- 18 honorary members
- 24 associate members (companies, university/research institutes, students associations)

□ **10 sections**

- Condensed matter physics,
- Astrophysics, Nuclear and Particles physics
- Applied physics
- Theoretical physics
- Atomic physics and Quantum optics
- Physics in Industry
- Education and Promotion of Physics
- History of physics
- Earth, Atmosphere and Environmental physics
- Biophysics, Soft matter and Medical physics

□ **Activities: Annual meeting, workshops, publications, awards, public outreach ...**



Associated members

□ Companies

- ABB Schweiz AG, 5405 Baden
- COMSOL Multiphysics GmbH, 8005 Zürich
- IBM Research GmbH, Forschungslabor, 8803 Rüschlikon
- METAS, 3003 Bern-Wabern
- Oerlikon Surface Solutions AG, LI-9496 Balzers

□ University/research institutes

- Albert-Einstein-Center for Fundamental Physics, Uni Bern, 3012 Bern
- CERN, 1211 Genève 23
- Swiss Plasma Center (SPC), EPFL, 1015 Lausanne
- Département de Physique, Université de Fribourg, 1700 Fribourg
- Departement Physik, Universität Basel, 4056 Basel
- Departement Physik, ETH Zürich, 8093 Zürich
- EMPA, 8600 Dübendorf
- Lab. de Physique des Hautes Energies (LPHE), EPFL, 1015 Lausanne
- Paul Scherrer Institut, 5332 Villigen PSI
- Physik-Institut, Universität Zürich, 8057 Zürich
- Section de Physique, Université de Genève, 1211 Genève 4
- Section de Physique, EPFL, 1015 Lausanne

□ Students associations

- AEP - Association des Etudiant(e)s en Physique, Université de Genève, 1211 Genève 4
- Fachschaft Physik und Astronomie, Universität Bern, 3012 Bern
- Fachschaft Physique, Université de Fribourg, 1700 Fribourg
- Fachverein Physik der Universität Zürich (FPU), 8057 Zürich
- Fachgruppe Physik Universität Basel, 4056 Basel
- Les Irrrotationnels, EPFL, 1015 Lausanne
- Verein der Mathematik- und Physikstudierenden an der ETH Zürich (VMP), 8092 Zürich



SPS - Activities

□ Annual meetings

- Covering all Sections of SPS
- Bringing Swiss physicists together — across their disciplinary boundary
- Award prizes
- Bring in industrial contacts
- A platform for young physicists to ‘learn’ how to present a poster and/or a talk in front of a professional audience
- A place where you can tie knots, mingle in, and strengthen your network

□ Seminars

□ Awarding young and gifted minds

- ABB General Physics prize
- IBM Condensed Matter prize
- OC Oerlikon Applied Physics prize
- METAS Metrology prize
- COMSOL Computational Physics prize

□ Awarding confirmed physicists

- Charpak-Ritz prize

□ Supporting young people formation

- EPS Young Minds
- Young Physicists’ Forum

□ Informing the public

□ Publications:

- Mitteilungen der SPG
- Newsletter

Awards

The SPS awards every year at its annual meeting five prizes of 5'000 CHF each for excellent work of young physicists.

The sponsors are ABB Research for “General Physics”, IBM Research for “Condensed Matter Physics”, OC Oerlikon for “Applied Physics”, METAS for work related to “Metrology”, and COMSOL for “Computational Physics”.





SPS Activities and Projects over last year

(non exhaustive)

□ SPS Annual Meeting

- with the participation of CHIPP, the Swiss Institute for Particle Physics, MARVEL, the NCCR for Computational Design and Discovery of Novel Materials
- special emphasis was placed on energy and climate.
- In 2018 at EPFL Lausanne: >360 participants, about 280 contributions, 16 plenary talks, 208 parallel talks, 75 posters and 11 commercial exhibitors; with general assembly, award session, poster prize, evening lectures, etc. (detailed report in “Mitteilungen” Nr. 59)

□ Organisation and/or sponsoring of events, e.g.:

- Sponsoring the Swiss Physics Olympiad (SwissPhO)
- Sponsoring of the Swiss Young Physics Tournament (SYPT)
- Sponsoring the International Physics Tournament (ITP)
- Joint Symposium with “Physikalische Gesellschaft Zürich” (PGZ)
- Supporting the Young Physicists Forum (YPF) on “Computational Physics” at ETHZ, YPF is a sub-commission of SPS with its president, Ana Roldán, invited to all SPS board meetings
- Promoting the very young with ‘Physik im Advent’
- etc., etc.



Physics Olympiad (SwissPhO, EuPhO, IPhO)

See also SPG Mitteilungen No 58, p. 55

<https://www.sps.ch/fileadmin/doc/Mitteilungen/Mitteilungen.58.pdf>

SwissPhO

On 16th and 17th of March 2019, the final round of the Swiss Physics Olympiad took place at the **Neue Kantonsschule Aarau**. The 26 finalists from a total of 815 participants students had to solve a set of theoretical problems as well as to perform an experiment. E.g. investigating the optical phenomenon of a halo, caused by ice crystals in the upper atmosphere and manifesting as a circular ring around the sun or the moon, or to experimentally determine the mass density of a specific oil.

EuPhO

Over 150 young participants from 36 countries participated in the 3rd European Physics Olympiad 2019 that took place from 31.5. to 04.06. in **Riga, Latvia**. Switzerland was represented by 5 young gymnasium students. The competition consisted of two five-hour tests.

IPhO

The best 364 young talents from 78 countries took part in the International Physics Olympiad in Tel Aviv, Israel from 7-15 July 2019. The young physicists solved three theoretical tasks and two experiments on the two examination days. For example, they investigated the physics of a microwave oven, measured the refractive index of a transparent disk, or analysed thermal and conductive properties of metals. Switzerland was represented by 5 young gymnasium students.



Participants of the 2019 finals of the Swiss Physics Olympiad.



Congratulations to the Swiss Teams



SwissPhO - Gold medallist

Cédric Solenthaler, Kantonsschule am Burggraben, SG,
 and **Hiro Farré**, Institut Le Rosey, VD, receiving the "**SPG Nachwuchsförderpreis**" /
 "**Prix de la Relève de la SSP**", given with the support of the Academy SCNAT.



IPhO Tel Aviv - Bronze Medalists

Cédric Solenthaler, Kantonsschule am Burggraben, SG and
Hiro Farré, Institut Le Rosey, VD were awarded with a **Bronze Medal**, and **Jonas Hofmann**, Kantonsschule Uster, ZH, achieved an **honourable mention**.



EuPhO Riga - Awardees

Ramón Buchenberger, Kantonsschule Wettingen, AG,
Oscar Yanjun Zhou, Lemania International School Altdorf, UR,
 and **Noah Roux**, Lycée Collège Creusets, V,D were awarded
 with an **honorable mention**.

International Physics Tournament

See also SPG Mitteilungen No 58, p. 56

<https://www.sps.ch/fileadmin/doc/Mitteilungen/Mitteilungen.58.pdf>

The International Physics Tournament IPT


The IPT is a competition, where physics students at universities participate in so called **Physics Fights**. **Three teams** (each consisting of **two to three students**) compete against each other.

They take turns **presenting** and **defending their solution** to a given problem, **criticizing** the solution of the **opposing** team and **reviewing** the performance of the two preceding teams, assessed by a jury. The teams have to try to convince both their opponents as well as the jury of the quality of their scientific work and results and of the understanding of physics.















The Swiss Selection

<http://switzerland.iptnet.info>

A team of EPFL Bachelor students in a tough competition won the Swiss Selection for the International Physicists' Tournament, which was held on 16 December 2018 at **Uni Geneva**. They represent Switzerland at the International Final, at **EPFL Lausanne** from 21st to 26th of April, 2019. About 150 students forming 19 teams from Europe, Russia, China, India, Australia and South America competed and the French team from Ecole Polytechnique Paris could decide the tournament for them. The Swiss team ranked respectably 5th.

EPFL Results of the IPT-2019 

Place	Country/University	Points
1st	France - École polytechnique	42.33 (Final)
2nd	France - Université de Lyon	41.17 (Final)
3rd	Ukraine - Kharkiv University	39.83 (Final)
4th	Russia - Voronezh	229.80 (5 PF)
5th	Switzerland	209.60 (5 PF)
6th	Colombia	206.90 (5 PF)
7th	Sweden	204.00 (5 PF)
8th	Ukraine - TSNUK	160.00
9th	Germany	157.24
10th	Denmark	156.00
11th	Italy	152.20
12th	Poland	151.80
13th	Croatia	148.84
14th	Brazil	147.20
15th	India	144.10
16th	USA	139.26
17th	Greece	138.55
18th	Australia	136.48
19th	Russia - MIPT	125.57



International Physics Tournament

See also SPG Mitteilungen No 58, p. 56

<https://www.sps.ch/fileadmin/doc/Mitteilungen/Mitteilungen.58.pdf>



Participants of the IPT 2019 at the new iconic square on EPFL campus - Place Cosandey. © F. Daburon



The Swiss team (all 3rd year physics students from EPFL): **Nicholas Greensmith** (captain), **Maxime Scheder**, **Ivan Rojkov**, **Ruslan Mushkaev**, and **Vincent Masson**.

and their Team Leader: Jean-Marie Fürbringer (EPFL)



Young Physics Tournament

(SYPT, IYPT)

The Young Physics Tournament YPT

The YPT is a competition, where physics enthusiasts from gymnasiums one to two years before receiving their matura participate, in so called **Physics Fights. Three teams** (each consisting of **two to three students**) compete against each other.

They take turns **presenting** and **defending their solution** to a given problem, **criticizing** the solution of the **opposing** team and **reviewing** the performance of the two preceding teams. The performance of all three teams is assessed by a jury.

The teams have to try to convince both their opponents as well as the jury of the quality of their scientific work and results and of the understanding of physics.

SYPT - Swiss Young Physicist Tournament

A total of 68 students in 23 teams participated at the SYPT 2019 on 23rd and 24th of March at the FHNW in Brugg-Windisch. The best team was selected, and the best individual participants formed the Swiss national team to participate at the IYPT.

IYPT - International Young Physicist Tournament

34 national teams participated in the IYPT 2019 in Warsaw, where the Swiss national team finished 3rd, narrowly behind Singapore and China.

Congratulations to the Swiss delegation consisting of **Daniel Gotsmann** (captain), **Manuel Antoinette**, **Oskari Jyrkinen**, **Michael Klein** and **Alisa Miloglyadova** winning **gold at the IYPT 2019** in Warsaw, Poland.



Swiss team finishing 3rd place and winning gold medal at the IYPT 2019 in Warsaw, Poland



Young Naturalist Tournament

(SYNT, IYNT)

The Young Naturalist Tournament YNT

The **Swiss Young Naturalists' Tournament (SYNT)** is a project-oriented science competition in English, where **students aged 12 to 16** from anywhere in Switzerland participate.

In so called *Science Fights* two teams (each consisting of two students who worked on **individual problems**) compete against each other.

The list of problems is published about 3 months in advance to the SYNT. The problem selection covers problems from different natural sciences: Biology, Chemistry and **Physics**.



Swiss team winning the IYNT 2018 in Tbilisi, Georgia

SYNT - Swiss Young Naturalist Tournament

A total of 58 students in 29 teams participated at the SYNT 2018 on 3rd of March at University of Zürich.

The best team was selected, and the best individual participants formed the Swiss national team to participate at the IYNT.

IYNT - International Young Physicist Tournament

15 national teams participated in the IYNT 2018 in Tbilisi, where the Swiss national team won .

Congratulations to the Swiss delegation consisting of **Michael Klein** (captain), **Esther Thomet**, **Lilli Klein**, **Lohith Sai Yadala Chanchu**, **Lucas Frauenlob**, **Samuel Züllig** for **winning the IYNT 2018**.

IYNT 2019 took place 19-23 August in Minsk, Belarus. — Too short to invite the Swiss team, but who we will invite next year.

<http://iynt.org/minsk>



Schweizer Jugend Forscht

(SJF)

The Young Naturalist Tournament YNT

The national competition Schweizer Jugend Forscht promotes young talents in research and science. Every year, around 100 young people are selected by an expert competition commission in a multi-stage selection process from almost 300 applications and individually supported by experts. Projects from all disciplines are evaluated. Work in the field of physics and technology is most strongly represented and accounts for almost a quarter of all final theses. With this national competition, SJF is making an important contribution to the promotion of young scientists in the field of physics and technology and thus to strengthening Switzerland as a research location.

Tobia Ochsner, Kantonsschule Schaffhausen, Schaffhausen — 2018
“Erstellen von Playlists mit Hilfe von künstlicher Intelligenz”

Sébastien Garmier, Kantonsschule Wohlen, Aargau — 2018
“cuRRay: CUDA-Raytracer für Lichtstrahlen in relativistischer Kerr-Newman-Raumzeit”

Florian Baumgartner, Technische Fachschule Biel, Bern — 2019
“Smart Digitizer IoT”

Luca Jost 2019, Technische Fachschule Biel, Bern — 2019
“Smart Digitizer IoT”



The two winners of the SPG Sonderpreis at SJF 2019



Physik im Advent (Promoting the very young)

Preise und Förderer

Wir bedanken uns bei allen Partnern und Förderern, die uns bei der Realisierung von „PiA – Physik im Advent“ unterstützen und insbesondere die Einzel-, Klassen und Schulpreise finanziell fördern.

Deutsche Physikalische Gesellschaft **DPG**

GEORG-AUGUST-UNIVERSITÄT GÖTTINGEN

Erreichen könnt Ihr uns über

Web: www.physik-im-advent.de

E-Mail: mail@physik-im-advent.de

www.facebook.com/PhysikImAdvent

www.twitter.com/PhysikImAdvent

Schirmherr von „PiA – Physik im Advent“
 Prof. Dr. Erwin Neher
 Biophysiker und Nobelpreisträger

Bitte meldet Euch ab 1. November 2017 auf der Webseite so schnell wie möglich an, damit Ihr alle Informationen bekommt.

Gerne nehmen wir Fragen, Vorschläge, Anregungen und Spenden entgegen.

Wenn Ihr neben Physik noch Lust auf clevere Mathematik habt, schaut mal unter www.mathkalender.de

Bitte kontaktieren Sie uns, wenn Sie Förderer werden wollen. Willkommen sind auch Sachspenden, die als Preise an die Kinder und Jugendlichen gegeben werden können. Sprechen Sie uns an.
foerderer@physik-im-advent.de (Prof. Dr. Arnulf Quidt)

Macht mit!

PiA Physik im Advent
 – der etwas andere Adventskalender im Dezember 2017
 Mitmachen und rechtzeitig anmelden unter physik-im-advent.de

Code scannen und mitmachen!

Noch 24 Experimente bis Weihnachten

Ihr nennt es Spielen, wir nennen es Experimentieren.

Mit „PiA – Physik im Advent“ haben wir einen **Adventskalender** der besonderen Art entwickelt: einen physikalischen Adventskalender. Darin stellen wir Jungforscherinnen und Jungforscherinnen und allen, die daran Spaß haben, **24 kleine einfache Experimente und physikalische Rätsel** vor.

Sie sollen die Freude am Selber-Experimentieren wecken oder für Spannung beim Zuschauen sorgen. Am Folgetag wird die Auflösung präsentiert.

Wie der Adventskalender funktioniert

Vom 1. bis zum 24. Dezember wird jeden Tag per Video-Clip ein Experiment vorgestellt, das Ihr nachmachen könnt. Auf der Webseite könnt Ihr anschließend die Fragen im Laufe des Tages beantworten. Die Auflösung der in dem Experiment aufgeworfenen physikalischen Frage erfolgt am nächsten Tag ebenfalls per Video.

Teilnehmen können **Schülerinnen und Schüler der Klassen 5 bis 10**, komplette Klassenverbände oder auch ganze Schulen.

Zudem sind auch alle interessierten Erwachsene aufgefordert, gemeinsam oder einzeln mitzuarbeiten und die Aufgaben zu lösen.

Mitmachen und gewinnen

Abgesehen vom Spaß am Experimentieren gibt es auch Preise zu gewinnen. **Prämiert werden die besten Antworten von einzelnen Schülerinnen und Schülern, Klassen und Schulen** in unterschiedlichen Altersstufen.

Jeder Teilnehmende oder jede teilnehmende Einrichtung erhält zusätzlich eine Urkunde mit den persönlichen Ergebnissen.

Macht mit!

SPS Supports and promotes Physik im Advent in Switzerland
 and sponsors prizes for participants from Swiss schools.

All can participate - but only school children can win!
Register in November for PiA2019:
<https://www.physik-im-advent.de>

Class G1f of the Kantonsschule Musegg, Lucerne, with physics teacher Remo Jakob, who participated in Physik im Advent in 2018 and had won.





Symposia together with regional societies

3. Internationales Jost Bürgi Symposium
Von Bürgis Uhren zur Femtosekunde – Eine kurze Geschichte der Zeitmessung

Am 3. und 4. Mai 2019 findet in Lichtensteig im schweizerischen Toggenburg im Kanton St. Gallen das 3. Internationale Jost Bürgi Symposium statt. Es soll wiederum an Person, Werk und Umfeld dieses dort geborenen Renaissance-Genies (1552-1632) erinnern, aber auch uns die Auswirkungen seines Schaffens bis in unsere heutige Zeit nahe bringen. Während das 2018 durchgeführte Symposium *Mit Bürgi zu den Sternen* auf seine astronomischen Leistungen verwies, steht diesmal mehr der erfindungsreiche Uhrenmacher im Mittelpunkt der Veranstaltung.

Workshop (Freitag 03. Mai 2019, 14 - 18 Uhr)
 Im Workshop bringen wir vier Beiträge von Historikern verschiedener Fachgebiete. Zuerst wird der Präsident der Jost-Bürgi-Gedächtnis-Stiftung und Historiker **Hans Büchler**, Wattwil (Kanton St. Gallen), über *Der Eidgenosse Jost Bürgi und seine Zeit* berichten, insbesondere über das Verhältnis der Eidgenossenschaft zum Heiligen Römischen Reich.

Danach spricht der langjährige Leiter der SPG Sektion "Geschichte der Physik", **Jan Lacki**, Universität Genf, über den Juristen und Physiker **Michel Varro**, A Geneva *forerunner of Galileo*, der 1584 in *De motu tractatus*, einer Abhandlung über theoretische Mechanik, bereits zu Schlussfolgerungen gelangte, die die später von Galilei formulierten Gesetzmässigkeiten über den freien Fall von Körpern erkennen liessen.

Ihm folgt der Physiker und Historiker **Tilman Sauer** von der Universität Mainz mit seinem Referat *Die Prosthaphärese zwischen geometrischer Konstruktion und numerischem Algorithmus*, eines Rechenverfahrens, das als unmittelbarer Vorläufer der Logarithmen gilt, indem es die Rückführung der Multiplikation und Division auf einfache Addition und Subtraktion mittels bestimmter trigonometrischer Beziehungen erlaubt.

Im abschliessenden Vortrag referiert **Michael Beck** von der Museumslandschaft Hessen Kassel über *Jost Bürgis Uhren im Astronomisch-Physikalisches Kabinett Kassel*. Neben der Kalenderuhr mit Gewichtremonteur und der "Observationsuhr" mit Kreuzschlag und Federremonteur geht es dabei vor allem um Bürgis Mondanomalienuhr. Dieser Vortrag, in dem er anhand des Deckelgetriebes der Stutzhur von 1592 Bürgis Ansatz zur Bestimmung der aktuellen Mondpositionen zeigen wird, leitet nahtlos zum Samstagprogramm über. Dazwischen gibt

es am Freitagabend ein "After Dinner Referat" über *Technik, Kunst und Wissenschaft an der astronomischen Uhr in Stralsund aus dem Jahre 1594* von **Jürgen Hamel**, Archonhold-Sternwarte Berlin.

Symposium (Samstag 04. Mai 2019, 10 - 13 Uhr)
 Der Samstagvormittag bringt zuerst zwei Vorträge zu Bürgi und seiner Zeit: **Günter Ostmann**, Technische Universität Berlin, referiert über *Zwei Hauptwerke Bürgis im Kunsthistorischen Museum zu Wien: Die "Bergkristalluhr" von 1622/27 und die ihm zugeschriebene "Planetenuhr" von 1605*, beide von ihm auf dem Prager Hradschin gefertigt. Bei der Planetenuhr handelt es sich um die weltweite Uhr, die den Planetenlauf um die Sonne anzeigt, während die Bergkristalluhr, ein Alterswerk Bürgis, von ihm selbst als seine perfekteste Uhr mit eingebautem Planetenglobus bezeichnet wurde.

Danach spricht **Peter Plasemeyer**, Direktor des Mathematisch-Physikalischen Salons der Staatlichen Kunstsammlungen Dresden, über *Ausgewählte Uhren aus dem Bestand des Salons*, u.a. auch über eine Jost Bürgi zugeschriebene Uhr. Der 1728 gegründete Salon ging aus der in der Mitte des 16. Jahrhunderts stammenden Kunstammer im Dresdner Residenzschloss hervor und ist im weltberühmten Dresdner Zwinger beheimatet.

Der zweite Programtteil macht uns vertraut mit modernen Zeitmessmethoden, illustriert durch faszinierende Anwendungen aus dem Sport- und Wissenschaftsbereich:

Zuerst berichtet **Peter Hürzeler**, früherer Leiter und heutiges Mitglied des Verwaltungsrates der zur Swatch-Gruppe gehörenden Firma Swisstiming LTD, Corgémont im Kanton Bern, in seinem Referat *Schweizer Präzisionsmesstechnik im Hochleistungssportbereich über den Werdegang der Zeit- und Längenmessung bei Olympiaden und Weltmeisterschaften von Beginn an bis heute*.

Danach wird **Beat Jeckelmann**, Forschungsverantwortlicher des Eidgenössischen Instituts für Metrologie METAS, Bern, über *Zeitdefinition und moderne Zeitmessung inklusive Atomuhren* referieren. Sein auch für Laien verständlicher Vortrag wird zeigen, dass Schweizer Institutionen in der Nachfolge Bürgis stehend bei der Entwicklung modernster Messtechnik weltweit an der Spitze mitwirken.

Programmdetails demnächst auf <https://www.jostbuergi.com/>.
 Wissenschaftliche Symposiumsleitung: **Bernhard Braunecker**, SPG Vizepräsident und **Peter Ulrich**, Universität Koblenz-Landau (DE)

See also SPG Mitteilungen No 57, p. 52
<https://www.sps.ch/fileadmin/doc/Mitteilungen/Mitteilungen.57.pdf>

Together with **Jost Bürgi Stiftung, VSMP, SAG**

Richard Feynman's centennial celebration



Program
Olivier Darrigol (CNRS, Paris VII)
The magic of Feynman's QED
Adrian Wüthrich (TU-Berlin)
Putting Feynman's style into context

Charalampos (Babis) Anastasiou (ETH)
Feynman diagrams and modern collider physics
Gabriele Veneziano (CERN, Collège de France)
Feynman's strong interaction side
Uwe-Jens Wiese (Bern)
Quantum Simulation: Feynman's Vision

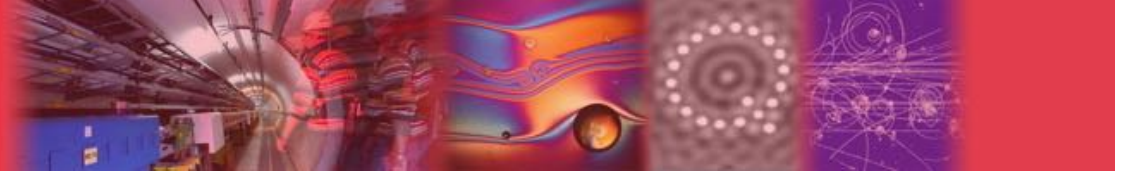
November 30th, 2018, 10am – 5pm
Sciences II – Auditorium A100
30, quai Ernest Ansermet, Geneva
https://indico.cern.ch/e/feynman_centennial
 Free entrance, no registration required

Organisation
 Hans Peter Beck (Bern), Jan Lacki (Geneva),
 Claus Beisbart (Bern), Christian Wüthrich (Geneva)




Together with History and Philosophy of Science Unit of University Geneva

See also SPG Mitteilungen No 57, p. 58
<https://www.sps.ch/fileadmin/doc/Mitteilungen/Mitteilungen.57.pdf>



EPS Historic Sites

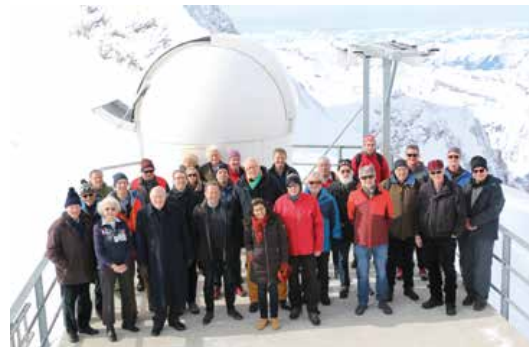
EPS Historic Site 2019

The **High Altitude Research Station Jungfrauoch HFSJG** (<https://www.hfsjg.ch/en/home/>) received the prestigious award as "EPS Historic Site" from the European Physical Society. This is the fifth recognition of Switzerland as a significant place for the development of modern physics after the Synchro-Cyclotron at Cern (2014), the Einstein Haus in Bern (2015), "Les Bastions" of the University of Geneva (2017) and the IBM Research Laboratory in Rüschlikon (2017). Switzerland takes the second place behind Italy with six awards.

The award ceremony took place in two steps, first with a half day symposium at the University of Bern on February 7th, followed by an excursion to the Jungfrauoch the day after,

where the plaque was unveiled by EPS President Rüdiger Voss (left picture, right) and the president of HFSJG foundation Silvio Decurtins (left). It is obvious that the plaque at a height of 3454 m belongs besides the Laboratory "Les Cosmiques" at Col du Midi in Chamonix to the 'highest' EPS awards.

About 30 scientists joined the ceremony and enjoyed the wonderful scenery at best weather conditions. The SPS president, vice-president and secretary followed the invitation and were deeply impressed by the relevance of the experiments for meteorology, climatology, solar and stellar astronomy.



See also SPG Mitteilungen No 57, p. 8

<https://www.sps.ch/fileadmin/doc/Mitteilungen/Mitteilungen.57.pdf>

European Physical Society Historic Site 2019



Jungfrauoch, Switzerland

A symposium organised by HFSJG and EPS with partners SCNAT, JB, SPS, University of Bern, Canton Bern, SNF Bern, February 7-8, 2019



Programme for Thursday, February 7, 2019, University of Bern, Main building, Hochschulstrasse 6, CH-3012 Bern, Kuppelraum

Time	Topic	Speaker/Authors	Rep.
13:30	Welcome, Opening, Introduction	Prof. Silvio Decurtins Prof. Martin C.E. Huber	HFSJG
14:00	Meteorology	Prof. Bertrand Calpin (MétéoSuisse, CH)	
14:30			
14:30	FTIR Measurements	Dr. Emmanuel Mahieu (Univ. Liège, B)	
15:00			
15:00	Cloud - Climate Interaction	Prof. Ulrike Lohmann (ETH Zürich, CH)	
15:30			
15:30	<i>Coffee Break</i>		
16:00			
16:00	Solar Constant	Chao Fushich (PMOD, CH)	
16:30	Cosmic Rays	Prof. Erwin Flückiger (HFSJG, CH)	HFSJG
17:00			
17:00	Astronomy	Prof. Stéphane Lédy (Univ. Genève, CH)	
17:30			
17:30	Today's activity at Jungfrauoch Program for the celebration on Jungfrauoch A short "EPS Historic Site" Plaque view Closing	Prof. Markus Leuenberger Director HFSJG	HFSJG
17:45			
18:00			
19:00	<i>Apéro zürche</i>		

Internet access:
Internet access is possible with the WLAN ESSID "eduroam" for participants of institutions that are a member of eduroam. The others may get a personal WiFi card from Dr. Rolf Bütikofer, HFSJG, to get internet access.

Jungfrauoch - 7-8 February 2019



Publications

SPS Newsletter

SPS Communications

<S|P|S> swiss physical society
 Newsletter, 8 August 2019

Dear Hans Peter Beck,
 You scientists shape this newsletter.

This newsletter is intended for all SPS members, researchers, industries, students, interested specialists and physics friends. Feel free to share this Newsletter within your community. If you would like to share some news with us, please contact Celine.Lichtensteiger@UniGe.ch.

WHAT'S UP IN SWITZERLAND?

SPS-Communications

The print-version of Nr. 58 of the SPS-Communications was recently delivered to all SPS-members, including many exciting articles about actual and former activities of our members. The whole paper can be downloaded from the SPS-website. [\[more\]](#)

DPG renews warning of serious consequences of man-made climate change

More than four decades ago, the German Physical Society warned of the dangers of man-made climate change. Coinciding with the Bonn Climate Change Conference in June 2019, the DPG now renews its appeal to do everything in its power to reduce the resulting additional greenhouse effect to a tolerable level. This is in line with statements made by SPS 'Global Warming and the Role of Science'. Indeed, the scientific facts are known since long and prompt action to drastically curb the burning of fossil fuel is required in every country. [\[more: DPG website: SPS-Communications#56 \(Editorial p.3\)\]](#)

Picture: Atmospheric CO₂ concentrations of the last 800,000 years re-constructed from measurements of air enclosed in ice cores from Antarctica. Data are from the University of Bern, University of Grenoble and NOAA (Lüthi et al., 2008, Nature 453, 379).

Kosmos in der Kammer

An Exhibition of the Central Library Zurich - 23 August-07 December 2019

There was a large need around 1500 for understanding the world after the new geographical discoveries. Many national governments created so called "KunstKammern" where cosmographic objects as well as printed texts, images and maps were collected. Among them were globes and astronomical clocks illustrating the new and revolutionary heliocentric view of the world. The exhibition also pays tribute to Swiss scientists of the 16th century as [Jost Bürgi](#), [Abraham Gessner](#), [Joachim Vadian](#) and also to the Reformer [Heinrich Bullinger](#) and many more. Their cosmographic work is worth to be reconsidered. [\[more\]](#)

Picture: Johann Meyer: Astronomia – Die Gestirn Kunst. Neujahrsblatt der Stadtbibliothek Zürich 1707, Radierung, 16.7 x 25.4 cm, auf Blatt 23.5 x 26.7 cm, Zentralbibliothek Zürich, Graphische Sammlung, Signatur AZZ 17 : 66

<S|P|S> swiss physical society
 Newsletter, 19 July 2018

Dear Hans Peter Beck,
 You scientists shape this newsletter.

This newsletter is intended for all SPS members, researchers, industries, students, interested specialists and physics friends. Feel free to share this Newsletter within your community. If you would like to share some news with us, please contact Celine.Lichtensteiger@UniGe.ch.

WHAT'S UP IN SWITZERLAND?

Prix Schläfli 2019 - Call for nominations

The Swiss Academy of Sciences (SCNAT) awards the Prix Schläfli 2019 for excellent scientific articles resulting from PhDs to young researchers who did their doctoral thesis at a Swiss university or to Swiss nationals who completed their PhD thesis abroad and who defended their thesis between 1 November 2015 and 31 October 2018.

In 2019, four awards are given for four natural sciences disciplines, among one is for physics.

The deadline for nominations is **31 October 2018**. [\[more\]](#)

Picture: Plume Grand Duc - Prix Schläfli. Credit: Caspar Klein.

Science Me! - Science Show Competition

An amazing third edition of "Science Me!", the European science show competition, took place with a cumulative count of ca. 1'400 spectators during the 12th "Nuit de la Science" in Geneva, 7-8 July 2018. Scientific teams from Switzerland, Italy, Germany, Czech Republic, Greece, Estonia, Hungary, Poland, the Netherlands, and Finland offered us fantastic science shows.

Physics was, as tradition dictates, widely represented, with almost 50% of the shows, the other domains being Mathematics, Chemistry, Biology, Astronomy, Neurosciences, and even Social Sciences and Humanities. The event attracts loyal teams, as 5 of them participated in the three editions.

With an incredibly well scripted show on the physics of microwaves, the team of Bonn University (Germany) won the first Prize, while slightly behind the team of Göttingen University (Germany) won the second Prize on the physics of customs clearance with dangerous goods. An independent team of Polish physicists won the third Prize with their improvisation show mostly based on physics. Two Special Prizes were attributed to an Italian chemist for the manufacture of a solar cell (ranking by other teams) and to a student of Swiss-Dutch biologists explaining in a funny way the protection paths of the immune system against virus attacks (ranking by the Jury).

The fourth edition will take place in Hannover, during the IdeenExpo 2019 science fair, 5-23 June 2019. [\[more\]](#)

<S|P|S> swiss physical society
 Newsletter, 26 June 2018

Dear Hans Peter Beck,
 You scientists shape this newsletter.

This newsletter is intended for all SPS members, researchers, industries, students, interested specialists and physics friends. Feel free to share this Newsletter within your community. If you would like to share some news with us, please contact Celine.Lichtensteiger@UniGe.ch.

WHAT'S UP IN SWITZERLAND?

12th edition of the "Nuit de la Science", Geneva, 7-8 July 2018

"Nuit de la Science" is an open air festival open for free to the public. Science stands waiting for you to change and discuss with scientists. Artists, artistic presentations, sound and images will show you different aspects in two beautiful places by the Geneva lake. The 12th edition of the "Nuit de la Science" is organized by the Musée d'histoire des sciences and will take place on July 2018 from 14h till late in the evening, and on Sunday 8 July 2018 from 10h till 16h.

Artists Research Culture workshops: let's co-construct the future of research at the Swiss Physical Society Meeting at 28 August 2018 13:30-16:00

Research culture is the culture within the scientific ecosystem that influences the way we do science, the people and ultimately, the work that is being done. It includes aspects such as research integrity, inclusivity, academic career trajectories and the peer review system.

Our ongoing commitment to improving research culture, the Swiss Academy of Sciences (SCNAT) is offering workshops on Research Culture to up to 12 participants of the Swiss Physical Society conference at EPFL this year. The workshop uses speculative scenarios to encourage novel thinking about what an idealised research culture like in 27 years time, with the aim to start with small changes today.

The workshop is open to researchers from all career stages but is limited to 12 participants. It is available on a first come, first served basis via the conference system. If you have any questions regarding the content of the workshops, please contact Yulia.Jenkins@epfl.ch. [\[more\]](#)

European Association for International Education Conference, Geneva, 11-14 September 2018

The annual EAIE conference and will take place in Geneva, a city with a rich history as home for international collaboration. This year's theme "ward" invites you to face outward. [\[more\]](#)

<S|P|S> swiss physical society
 Nr. 58
 Juli 2019

SPG MITTEILUNGEN COMMUNICATIONS DE LA SSP

Symposium 125th Anniversary of Georges Lemaître 21 November 2019, Kuppelsaal, Hauptgebäude, Universität Bern, Hochschulstrasse 4, 3012 Bern

While the PSI celebrated last year its 30th anniversary (p. 44), the SPS commemorates in 2019 two older jubilees: the 125th anniversary of Georges Lemaître with a dedicated symposium (p. 58), and the UNESCO International Year of the Periodic Table of Chemical Elements with a special session at our Joint Annual Meeting (p. 25). The picture on the left shows the presumably oldest periodic table still existent in the world (p. 3). Courtesy of the University of St Andrews Library (ms3012).

Periodische Gesetzmässigkeit der Elemente nach Mendelejew.

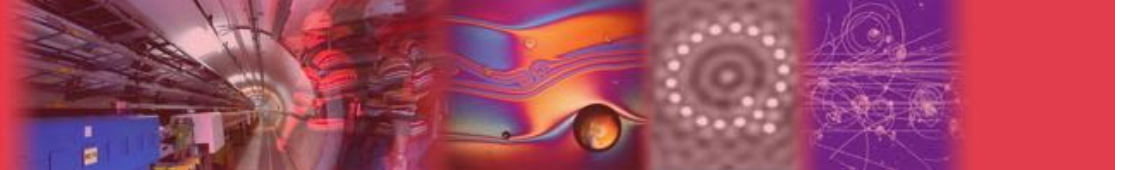
Gruppe I	Gruppe II	Gruppe III	Gruppe IV	Gruppe V	Gruppe VI	Gruppe VII	Gruppe VIII
R ² O	R ² O ₃	RH ³	RH ⁴	RH ⁵	RH ⁶	RH ⁷	RO ⁴
1 H-1							
2 Li-7	B-9,4	B-11	C-12	N-14	O-16	F-19	
3 Na-23	Mg-24	Al-27,3	Si-28	P-31	S-32	Cl-35,5	
4 K-39	Ca-40	Sc-44	Ti-48	V-51	Cr-52	Mn-55	Fe-56, Co-59, Ni-59, Cu-63
5 (Ca-63)	Zn-65	Ga-68	Ge-72	As-75	Se-78	Br-80	Ru-104, Rh-104, Pd-100, Ag-108
6 Rb-85	Sr-87	Y-88	Zr-90	Nb-94	Mo-96		
7 (Ag-108)	Cd-112	In-113	Sn-118	Sb-122	Te-125	I-127	
8 (Cs-133)	Ba-137	La-138					
9 (La-138)	Hf-178	Ta-182	W-184				
10 (Au-198)	Hg-200	Tl-204	Pb-208	Bi-210			
11 (Po-210)							
12							

Joint Annual Meeting of the
 SWISS PHYSICAL SOCIETY
 AUSTRIAN PHYSICAL SOCIETY
 26 - 30 August 2019, Universität Zürich

in collaboration with ASSOCIATION MANEP, NCCR QSIT AND SGN
 General Information: p. 11, preliminary program p. 14

Download for free at <http://sps.ch>

Register for free at <https://newsletter.sps.ch/lists/>



Financial Report and Audit 2018

See also SPG Mitteilungen No 58, p. 9

<https://www.sps.ch/fileadmin/doc/Mitteilungen/Mitteilungen.58.pdf>

Jahresrechnung – Bilan annuel – Annual financial statement 2018

as of December 31, 2018

presented by Dr. Dirk Hegeman, EMPA
Treasurer of SPS



Jahresrechnung – Bilan annuel – Annual financial statement 2018

	Aktiven	Passiven	
Umlaufvermögen (current assets)			(in CHF)
Postscheckkonto	19594,44		
Bank - UBS 230-627945.M1U	32692,94		
Debitoren - Mitglieder	2907,50		
Debitoren - SCNAT/SATW u.a.m.	123424,60		
Anlagevermögen (fixed assets)			
Beteiligung EP Letters	15840,00		
Mobilien	1,00		
Fremdkapital (dept capital)			
Mobilier		1,00	
Mitglieder Lebenszeit		69958,25	
Transitorische Passiven		15568,92	
Eigenkapital (equity capital)			
Vefügbares Vermögen		90623,62	
Total Aktiven/Passiven	194460,48	176151,79	
Gewinn		18308,69	(profit in 2018)
Summe	194460,48	194460,48	
Verfügbares Vermögen per 31.12.18 nach Gewinnzuweisung:		108932,31	(available assets)



Erfolgsrechnung – Compte de résultat – Income statement 2018

Erfolgsrechnung per 31.12.2018			
	Aufwand	Ertrag	Ertrag
Gesellschaftsaufwand		Ertrag	
EPS - Membership	13558,64	Mitgliederbeiträge	95425,24
SCNAT - Membership	7686,00	Sponsorbeiträge	150,00
SPG Preise	85,15	Inserate/Flyerbeilagen SPG Mitteilungen	5334,90
SATW-Mitgliederbeitrag	1750,00	Aussteller	13720,95
		Verkauf Broschüren	28,00
SCNAT Verpflichtungskredite		Zinsertrag	3,10
SPG Jahrestagung	19201,35	Ertrag aus EP Letters Beteiligung	11436,55
Schweizer Physik Olympiade	4000,00		
SPG Young Physicist's Forum	5903,44	SCNAT Verpflichtungskredite	
Lehrerfortbildungsevent	1268,35	SPG-Jahrestagung (SCNAT)	15000,00
International Physics Tournament	1810,18	Schweizer Physik Olympiade	3500,00
Projet Physique et Société	2154,00	SPG Young Physicist's Forum	3500,00
SPG Bulletin/Tagungsband (SCNAT)	10395,10	Lehrerfortbildungsevent 2014 ff	5000,00
SCNAT Periodika (SPG Mitteilungen, Druckkosten)	19580,66	SPG Defizitgarantie Jahrestagung	10000,00
SCNAT Internationale Zusammenarbeit	2502,10	SPG/APS FECS Studentenaustausch	4000,00
SCNAT Swiss Young Phys. Tournament	5500,00	International Physics Tournament	4000,00
MAP Brochure "Physics and the Swiss Society"	25201,78	Projet Physique et Société	2000,00
MAP "Physics for Public"; Newsletter	6200,00	SPG Bulletin/Tagungsband (SCNAT)	5000,00
Betriebsaufwand		Periodika (SPG-Mitteilungen, Druckkosten) (SCNAT)	5000,00
Löhne	26422,43	Internationale Zusammenarbeit (SCNAT)	2000,00
Sozialleistungen, berufl. Vorsorge, Versicherung	16138,95	SCNAT Swiss Young Phys. Tournament	4000,00
Porti/Telefonspesen/WWW- und PC-Spesen	918,75	MAP Brochure "Physics and the Swiss Society"	23000,00
Versand (Porti Massensendungen)	5271,19	MAP "Physics for Public"; Newsletter	6000,00
Unkosten	3446,13		
Büromaterial	4766,40		
Bankspesen	336,33		
Debitorenverluste Mitglieder	1473,00		
Debitorenverlust SCNAT/SATW u.a.m.	14220,12		
Total Aufwand/Ertrag	199790,05		218098,74
Gewinn	18308,69		
Summe	218098,74		218098,74

(in CHF)

Early Loss/Win (CHF)

2012: +27'276

2013: -1'735

2014: +31'562

2015: +4'486

2016: -5'246

2017: -3'326

2018: +18'308



Revisorenbericht zur Jahresrechnung 2018

Rapport des réviseurs – Auditor's report

Revisorenbericht zur Jahresrechnung 2018

Die Jahresrechnung 2018 der SPG wurde von den unterzeichneten Revisoren geprüft und mit den Belegen in Übereinstimmung befunden.

Die Revisoren empfehlen der Generalversammlung der SPG, die Jahresrechnung zu genehmigen und den Kassier mit bestem Dank für die gute Rechnungsführung zu entlasten.

Die Revisoren der SPG:

Prof. Dr. Philipp Aebi

Dr. Pierangelo Gröning

*(The financial statement
2018 was proved and
agreed by the auditors who
recommend to discharge the
SPS Board.)*

Many thanks to



Pascal Ruffieux

treasurer SPS 2012-2018

Dübendorf, 15.03.2019



ELECTIONS



SPS Board Members

3. Vorstand

Art. 6

Der Vorstand besteht aus einem Präsidenten, einem Vizepräsidenten, einem Sekretär, einem Kassier, den Vertretern der Fachgruppen sowie den Kommissionspräsidenten. Der Vorstand führt das administrative Sekretariat. Der Sekretär kann zugleich das Amt des Kassiers einnehmen.

Die Mitglieder des Vorstandes werden von der Generalversammlung für die Dauer von zwei Jahren gewählt. Die einmalige Wiederwahl des Präsidenten für die Dauer von 2 Jahren ist möglich. Die übrigen Vorstandsmitglieder können höchstens zweimal für jeweils weitere 2 Jahre wiedergewählt werden.

Art. 7

Der Vorstand kann in Sachfragen externe Delegierte beziehen.

3. Le comité

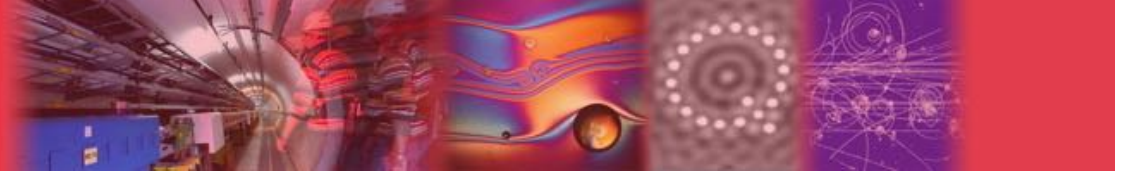
Art. 6

Le comité se compose d'un président, d'un vice-président, d'un secrétaire, d'un trésorier, des représentants des groupements spécialisés et des présidents des commissions. Le comité s'occupe du secrétariat administratif. Le secrétaire peut également remplir la fonction de trésorier.

Les membres du comité sont élus par l'assemblée générale pour une durée de deux ans. Le président est rééligible seulement une fois pour deux années de plus. Les autres membres du comité peuvent se faire réélire au plus deux fois pour deux ans chaque fois.

Art. 7

Le comité peut, pour des questions particulières, mandater des personnes extérieures.



SPS Board — 2018



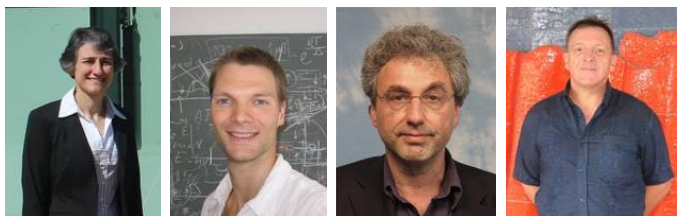
Präsident
[Prof. Dr. Hans Peter Beck](#)

Vize-Präsident
[Dr. Bernhard Braunecker](#)

Sekretär
[PD Dr. Lukas Gallmann](#)

Kassier
[Dr. Dirk Hegemann](#)

Vorsitzende der Sektionen



Kondensierte Materie
[Prof. Laura Hevdermán](#)

Kondensierte Materie
[Prof. Henrik Ronnow](#)

Angewandte Physik
[Prof. Leonid Rivkin](#)

Angewandte Physik
[Dr. Laurie Porte](#)

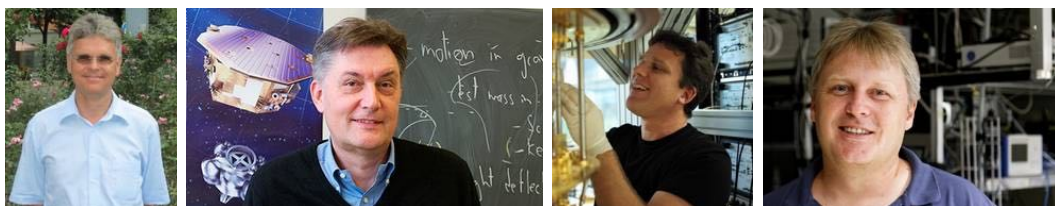


Atomphysik und Quantenoptik
[Prof. Philipp Treutlein](#)

Physikausbildung und -förderung
[Dr. Céline Lichtensteiger](#)

Physikausbildung und -förderung
[Prof. Andreas Müller](#)

Geschichte und Philosophie der Physik
[Prof. Claus Beisbart](#)



Kern-, Teilchen- und Astrophysik
[Dr. Andreas Schopper](#)

Theoretische Physik
[Prof. Philippe Jetzer](#)

Physik in der Industrie
[Dr. Andreas Fuhrer](#)

Physik in der Industrie
[Dr. Thilo Stöferle](#)



Physik der Erde, Atmosphäre und Umwelt
[Dr. Stéphane Govette](#)

Biophysik, Weiche Materie und Medizinische Physik
[Prof. Giovanni Dietler](#)



SPS Board — 2019



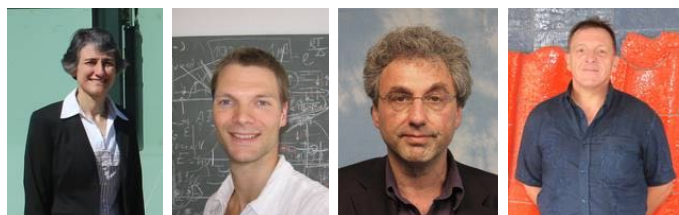
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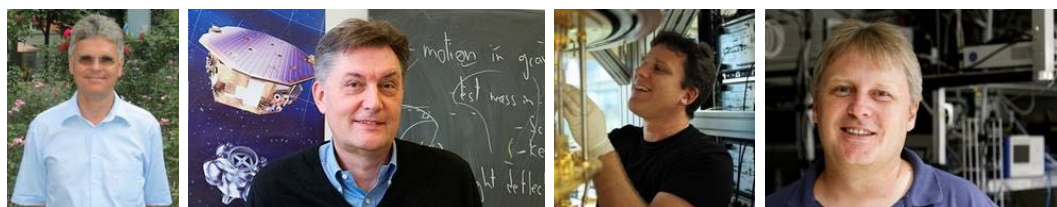


Atomphysik und Quantenoptik
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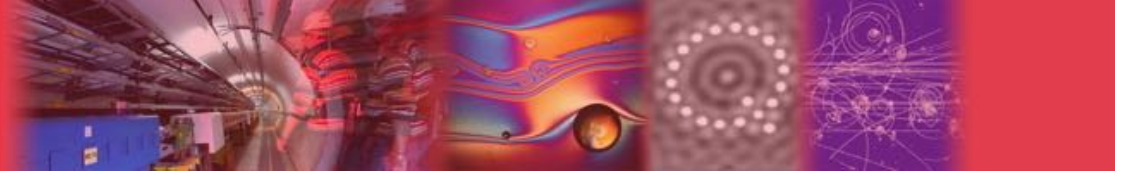
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[Dr. Andreas Fuhrer](#)

Physik in der Industrie
[Dr. Thilo Stöferle](#)



Physik der Erde, Atmosphäre und Umwelt
[Dr. Stéphane Govette](#)

Biophysik, Weiche Materie und Medizinische Physik
[Prof. Giovanni Dietler](#)



Re-election



Prof. Hans Peter Beck
(President)

2020-2021



Dr. Bernhard Braunecker
(Vice-president)

2019-2020



Prof. Philipp Treutlein
(Atomphysik und Quantenoptik)

2020-2021



Physics of the Earth, Atmosphere, and Environment

Vacant

Experts in the field at ETHZ, EPFL, University of Bern,...
have been contacted, but are reluctant to commit themselves.

The main reason is that these people are engaging already in many associations,
expert bodies, discussion groups, other more interdisciplinary learned societies, e.g. ProClim, etc.

It's, as you can imagine, a hot field facing many ideologically driven discourses.

As **physics is at the fundamental base of all science**, it has a special role in bringing the solid reasoning of thermal radiation, heat and energy balance into the discussions. I.e. the physics of the Earth, Atmosphere, and Environment.

The section head is vacant. A new person, once identified, will step in immediately — ad interim — and will stand for election in 2020.



DELEGATES



Statuten der SPG

4. Beziehungen zu anderen wissenschaftlichen Gesellschaften und internationalen Organisationen

Art. 11

Die SPG ist eine Mitgliedorganisation der „Akademie der Naturwissenschaften Schweiz“ (SCNAT) und anerkennt deren Statuten als für sich verbindlich.

Art. 12

Der Vorstand der SPG ernennt ihren Abgeordneten und dessen Stellvertreter in die Delegiertenversammlung der SCNAT.

Art. 13

Die SPG ist eine Mitgliedsgesellschaft der „Schweizerischen Akademie der Technischen Wissenschaften“ (SATW) und anerkennt deren Statuten als für sich verbindlich. Die SPG wird durch einen Abgeordneten in der Mitgliederversammlung der SATW vertreten.

Art. 14

Die SPG ist „Ordinary Member“ der „European Physical Society“ (EPS).

Art. 15

Der Vorstand der SPG nimmt den Auftrag als Nationales Komitee der „International Union of Pure and Applied Physics“ (IUPAP) ein. Der Präsident der SPG ernennt einen oder gegebenenfalls mehrere Abgeordnete, welche die Verbindung mit der IUPAP unterhalten. Sind die Abgeordneten nicht Mitglied des Vorstandes der SPG, werden sie dennoch eingeladen, an dessen Sitzungen teilzunehmen.

Art. 16

In Zusammenarbeit mit dem „Institut Henri Poincaré“ (IHP) wird eine Zeitschrift mit dem Titel „Annales Henri Poincaré“ (AHP) herausgegeben. Sie dient der Veröffentlichung von Arbeiten der mathematischen und theoretischen Physik. Die Beteiligung basiert auf der „Helvetica Physica Acta“, welche der SPG gehörte.

Art. 17

Die Zusammenarbeit zwischen der SPG und dem IHP bezüglich der AHP ist in den „Statutes of AHP“, welche auf Anfrage hin eingesehen werden können, geregelt. Ein separates „Journal Publishing Agreement“ regelt die Zusammenarbeit mit einem Verlag.

Art. 18

Der Vorstand der SPG ernennt einen AHP Delegierten, welcher die Rolle der SPG im Aufsichtsorgan zwischen SPG, IHP und dem Verlag vertritt.

Statuts de la SSP

4. Les relations avec d'autres sociétés scientifiques et des organisations internationales

Art. 11

La SSP est affiliée à l' «Académie suisse des Sciences Naturelles» (SCNAT) et adhère à ses statuts.

Art. 12

Le comité de la SSP désigne un délégué et un suppléant à l'assemblée des délégués de la SCNAT.

Art. 13

La SSP est affiliée à l' «Académie Suisse des Sciences Techniques» (SATW), et adhère à ses statuts. La SSP est représentée par un délégué lors de l'assemblée de la SATW.

Art. 14

La SSP est „Ordinary Member“ de la „European Physical Society“ (EPS).

Art. 15

Le comité de la SSP prend le rôle du comité national de l' „International Union of Pure and Applied Physics“ (IUPAP). Le président de la SSP nomme un ou plusieurs délégués qui restent en relation avec l'IUPAP. Si les délégués ne sont pas membres du comité de la SSP, ils seront également invités aux séances.

Art. 16

Un journal, portant le titre „Annales Henri Poincaré“ (AHP), est publié en collaboration avec l'Institut Henri Poincaré (IHP). Ce journal permet la publication de travaux dans les domaines de la physique mathématique et théorique. La participation de la SSP est basée sur „Helvetica Physica Acta“, journal qui appartenait à la SSP.

Art. 17

La collaboration entre la SSP et l'IHP concernant AHP est réglée par les statuts des AHP, qui peuvent être consultés sur demande. Un „Journal Publishing Agreement“ séparé régit la collaboration avec la maison d'édition des AHP.

Art. 18

Le comité de la SSP nomme un délégué AHP qui représente la SSP dans les différents organes du journal et de la maison d'édition.

Delegierte		
G. M. Graf (AHP)	X (4)	
T. Jung (AHP)	X (4)	
M. Q. Tran (IUPAP)	X (3, 4)	
H. P. Beck (EPS)	X (1, 4)	
K. Hencken (SATW)	X (2)	
C. Rossel (SCNAT)	X (4)	



Delegierte		
G. M. Graf (AHP)	X (4)	
T. Jung (AHP)	X (4)	
H. P. Beck (IUPAP)	X (3, 4)	
H. P. Beck (EPS)	X (1, 4)	
K. Hencken (SATW)	X (2)	
C. Rossel (SCNAT)	X (4)	

- (1): Traditionsgemäß ist der Präsident gleichzeitig EPS-Delegierter, keine Regel in den Statuten.
- (2): Es gibt keine Regel in den Statuten betreffend "Wahl" oder "Ernennung" des SATW-Delegierten.
- (3): Traditionsgemäß ist der Alt-Präsident gleichzeitig IUPAP-Delegierter. (Statuten: "Der Präsident ernennt...".)
- (4): Keine Wahl an der GV nötig (Statuten: "Der Vorstand ernennt...".)

Ausschreibung der SPG Preise

Annonce des prix de la SSP

Die SPG vergibt jedes Jahr an ihrer Jahrestagung Preise die mit je CHF 5000.- dotiert sind.

La SSP attribue annuellement des prix de CHF 5000.- chacun, à sa réunion annuelle.

- SPG Preis gestiftet vom Forschungszentrum ABB Schweiz AG für eine hervorragende Forschungsarbeit auf allen Gebieten der Physik



- Le prix SSP offert par le centre de recherche ABB Schweiz AG pour un travail de recherche d'une qualité exceptionnelle dans tout domaine de la physique

- SPG Preis gestiftet von der Firma IBM für eine hervorragende Forschungsarbeit auf dem Gebiet der Kondensierten Materie



- Le prix SSP offert par l'entreprise IBM pour un travail de recherche d'une qualité exceptionnelle en physique de la matière condensée

- SPG Preis gestiftet von der Firma Oerlikon Surface Solutions für eine hervorragende Forschungsarbeit auf dem Gebiet der Angewandten Physik



- Le prix SSP offert par l'entreprise Oerlikon Surface Solutions pour un travail de recherche d'une qualité exceptionnelle dans le domaine de la physique appliquée

- SPG Preis gestiftet vom METAS für eine hervorragende Forschungsarbeit mit Bezug zur Metrologie



- Le prix SSP offert par le METAS pour un travail de recherche d'une qualité exceptionnelle faisant référence au domaine de la métrologie

- SPG Preis gestiftet von der Firma COMSOL für eine hervorragende Forschungsarbeit auf dem Gebiet der computergestützten Physik



- Le prix SSP offert par l'entreprise COMSOL pour un travail de recherche d'une qualité exceptionnelle dans le domaine de la physique numérique



SPS awarding young and gifted minds

□ **ABB General Physics Prize**

→ **Matteo Fadel (Uni Basel)**

Quantum metrology and non-classical correlations in ultracold atomic ensembles

□ **IBM Condensed Matter Prize**

→ **Eduardo Baldini (MIT [EPFL])**

Nonequilibrium Dynamics of Collective Excitations in Strongly Interacting and Correlated Quantum Systems

□ **OC Oerlikon Applied Physics Prize**

→ **Shadi Fatayer (IBM, ETHZ)**

High precision experiments with zeptoampere resolution using Atomic Force Microscopy

□ **METAS Metrology Prize**

→ **Ileana Cristina Benea-Chelmus (ETHZ)**

Terahertz quantum optics with ultrashort pulses

□ **COMSOL Computational Physics Prize**

→ **Amir H. Ghadimi (EPFL)**

Elastic strain engineering for ultra-low mechanical dissipation

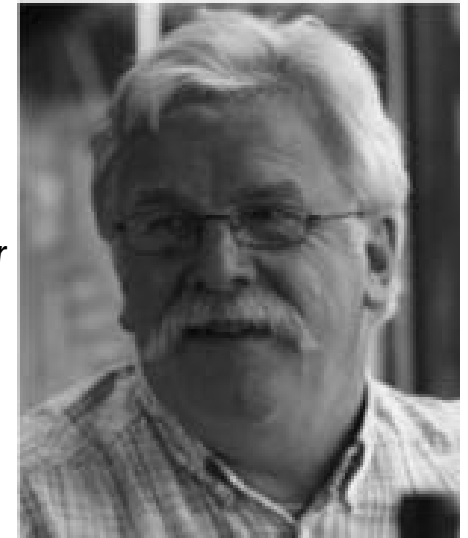


SPS awarding confirmed physicists

The Charpak-Ritz Prize 2019 is awarded to Benoît Deveaud

This year Professor Benoît Deveaud, best known to Switzerland from his former activities at EPFL and since 2017 acting as Vice Provost for Research at École Polytechnique (France), is honored for his *"pioneering optical spectroscopy studies dedicated to the ultrafast and quantum optical properties of semiconductor nanostructures."*

The significance of the prize is twofold: on the one hand it is intended to show every year the deep connection between the two founder societies, the [Société Française de Physique](#) (SFP) and the Swiss Physical Society (SPS), on the other hand it is intended to honour a colleague whose contributions to Physics are considered as of epochal character. In odd years like 2019 a person is elected by the Swiss Physical Society out of three candidates that have been short-listed and nominated by the French Physical Society, in even years this relation is inverted.



La Société Suisse de Physique et la Société Française de Physique félicitent Benoît Deveaud pour le prix Charpak-Ritz 2019

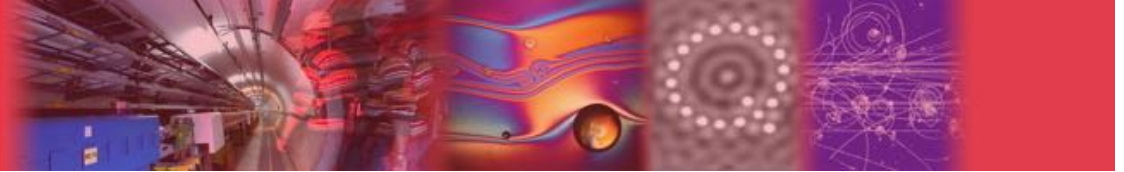


VARIA



SPS — Mission

- The Swiss Physical Society is a ‘learned society’ with the goals and interests to
 - Link and interlink physicists in Switzerland and beyond
 - physicists are
 - professionals, teachers, undergrad and grad students, postdocs who are directly active in physics
 - ▷ academia, research institutes, industry, schools
 - or who are simply interested in physics
 - ▷ curiosity driven and all ages
 - Be a voice and a contact for physicists in Switzerland and beyond



A note from the President

See also SPG Mitteilungen No 58, p. 5

<https://www.sps.ch/fileadmin/doc/Mitteilungen/Mitteilungen.58.pdf>

SPS is supporting young physicists via the *Young Physicists Forum* (YPF). YPF fosters links across all students' associations at Swiss universities and is organizing a yearly young physicists forum event. In 2018, the topic chosen was 'Particle Physics' and was organized 4-6 May at CERN, with participants from all over Switzerland and the help of SPS. The SPS was again involved in the Swiss Physics Olympiad, SwissPhO and in the International Physics Tournament, IPT. The Swiss team was winning the final of the IPT 2018, at the Moscow Institute of Physics and Technology (MIPT), competing against teams from fifteen countries.

With what we can do today, and with what an educated and savvy next generation of talents will be able doing, climate change, energy strategy 2050, artificial intelligence, quantum computing, and many more challenges can all be tackled. It needs, however, an environment which allows these talents to flourish. SPS is taking its share in contributing exactly here, with your help of being a Member, an Associate Member or a SPS Prize sponsor.

Hans Peter Beck



Support SPS

- Become a member of SPS and support its activities
- Advertise SPS membership in your professional environment
 - e.g. to your students, your co-workers, your staff, etc.

Membership

Download the application form from www.sps.ch and send it completed with your data to the SPS office.

The annual membership fees are (in CHF):

Ordinary Members:	80.-
Students (before master degree):	free
Associate members:	
Group A: Companies	500.- *
Group B: Institutes, Universities	1500.- *
Group C: Students Associations	0.- *

* = minimum amount, donations are appreciated

Lifetime membership (once): 1600.-

Special fees:

PhD Students	
1 st year of membership:	free
2 nd and 3 rd year of membership:	40.-
Double members DPG, ÖPG or APS:	60.-
Double affiliation SPS-PGZ:	
a) Ordinary Members	90.-
b) Double members DPG, ÖPG or APS	70.-
c) PhD Students 2 nd + 3 rd year of membership	40.-
Libraries:	100.-

IDP Sciences, Uni Fribourg



Contact

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