

SPG MITTEILUNGEN

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Now, if that was not a good reason to come to Lausanne...

Editorial: Young Members Welcome !

After many years of decreasing membership, the derivative has changed sign in 2006. During the last twelve months more entries than leavings have been registered. After one decade of decreasing member numbers, we finally found a few new concepts in order to increase the membership. It is therefore worth to try to find even better concepts. The German Physical Society (DPG) has been very successful in this field resulting in a nearly exponential increase. In order to find out the secret of our northern neighbours' success, we analyzed their recruiting concept and found a lot of interesting offers to students and young physicists, that are powerful enough to attract mainly the next generation of physicists. As a result, the mean age in the DPG nowadays is quite low.



How about the recruitment of new students? Comparing the number of students in Swiss universities to the numbers of German universities, we find that the number in Germany has decreased dramatically whereas the number of physics students in Switzerland remained more or less constant. Switzerland seems to be in good company: an overall analysis of the student numbers in Europe shows that although the number of students in total increases rapidly, the number of physics students remains constant.

The week after Easter, 40 physicists from 20 different European countries as well as 7 representatives of overseas societies came together in Graz for the forum "Physics and Society". The role of physics and its interaction with society has been intensively discussed and a resolution and recommendation paper has been edited. One of the topics that have been intensively discussed was the goal of physics education at different levels from primary school to university. Most of the participants believed that a good physics education is one of the most important actions in order to recruit new physics students.

Let's hope that the various Swiss and European initiatives to increase the quality of physics education will be fruitful and we look forward to an enthusiastic next generation of physicists. It is the task of the SPS to attract the young generation to become member and the society has to remain attractive for all physicists whatever career they are choosing. The committee is glad that Bernhard Braunecker und Christophe Rossel accepted to concretise the above ideas and to present new concepts in order to increase the membership of our society, focussing on the next generation: Young Members Welcome!

Tibor Gyalog, SPS President

Pre-Announcement: Annual Meeting of the SPS 2007

The next annual meeting will take place at the University of Zürich (on the Irchel Campus) on February 20 - 21, 2007. The detailed announcement with all information will be published in the next issue of the "SPG Mitteilungen", to be released in September 2006.

The Winners of the SPS Awards 2006

The SPS award committee, presided by Prof. Piero Martinoli (Uni Neuchâtel), has again been successful in nominating three young physicists for their outstanding work, presented below.

SPS Award for General Physics, sponsored by ABB

Christian Rüegg (AG) studied at the ETH Zürich, where he obtained his Diploma in Physics with distinction in 2001 and the PhD in 2005 with a thesis at the Laboratory for Neutron Scattering of the ETH Zürich and the Paul Scherrer Institute under the supervision of Prof. Albert Furrer. At present he is a post-doc at the London Centre for Nanotechnology of the University and Imperial College in London. In his work he used inelastic neutron scattering techniques to investigate the rich low-temperature phase diagram of quantum magnetic systems by tuning their spin-gap energy with a magnetic field, hydrostatic pressure or composition, thereby discovering a wealth of novel physical phenomena, in particular an ordered phase which is best described by a Bose-Einstein condensation of magnetic quasi-particles.

Investigation and Characterization of the Excitation Spectrum and the Field-, Pressure- and Doping-Induced Quantum Phase Transitions in Quantum Spin Systems

Quantum magnetic systems have in recent years offered diverse opportunities for the study of a broad range of novel physical phenomena including BEC of magnons, Bose-glasses, resonating valence-bond phases and Luttinger-liquid regimes [1]. A possible starting point is hereby a spin Hamiltonian with a quantum-disorder ground-state and gapped singlet-triplet excitations, e.g. Haldane, ladder or dimer spin systems. Tuning the spin-gap energy by a magnetic field, hydrostatic pressure or composition results in rich low-temperature phase diagrams, which can be investigated by inelastic neutron scattering (INS) [2]. A magnetic field tunes TlCuCl_3 through a quantum critical point (QCP) to an ordered phase, which consists of a mixture of triplet states into the sea of non-magnetic singlets and is best described by a BEC of magnetic quasi-particles. Related to the nature of this novel ground-state for solid-state systems, TlCuCl_3 above the field-induced transition shows a very characteristic excitation spectrum, which could be observed for the first time. In contrast, the closely related compound NH_4CuCl_3 surprisingly features distinct plateaus at fractional values of the magnetic saturation. The microscopic origin of such unconventional behaviour is revealed also by INS in high magnetic fields. The fundamental difference between the two classes of magnetic insulators, which include many other systems currently under investigation, can be understood in analogy with phase transitions observed in ultra-cold atomic gases and electronic conductors [1]. A pressure-induced QCP could additionally be achieved in TlCuCl_3 and was investigated in detail by measuring the elementary excitations across the transition. In consequence of these recent studies, the concept of magnetic order as known since a long time needs to be extended by a new class of magnetically ordered phases occurring beyond a quantum phase transition at the lowest temperatures - an exciting topic of current research in solid state physics.

[1] T. M. Rice, *Science* **298**, 760 (2002).

[2] Ch. Rüegg et al., *Nature* **423**, 62 (2003); *Phys. Rev. Lett.* **93**, 037207 (2004); *Phys. Rev. Lett.* **93**, 257201 (2004); *Phys. Rev. Lett.* **95**, 267201 (2005).

SPS Award for Condensed Matter Physics, sponsored by IBM

Patrycja Paruch is Polish. She obtained her Bachelor of Arts "magna cum laude" at the Physics Harvard College in 2000 and the PhD in 2004 with a thesis at the Département de Physique de la Matière Condensée of the University of Geneva under the supervision of Prof. Jean-Marc Triscone. At present she is a post-doc at the Laboratory of Atomic and Solid State Physics of the Cornell University. In her work she used the nanoscale resolution provided by atomic force microscopy to investigate the dynamics of ferroelectric domains and of the thin elastic domain walls separating these domains in epitaxial perovskite thin films, thereby providing a deeper understanding of the mechanisms controlling the pinning and propagation of elastic objects in disordered media. This is of great importance for the electromechanical and information storage applications of perovskite materials.

Ferroelectric domain walls as elastic objects in disordered media

Understanding the mechanisms controlling the pinning and propagation of elastic objects in disordered media is important for a wide range of physical systems. We have used the existing theoretical framework, combined with the nanoscale resolution provided by atomic force microscopy, to investigate the behavior of ferroelectric domains, or regions with opposite polarization, and of the thin elastic "walls" separating these regions from each other in epitaxial perovskite thin films. In these materials, particularly interesting from the point of view of micro-electromechanical applications and information storage, we have written ultra-high density domain arrays, with feature size as small as 15-20 nm, which remain stable throughout the period of observation (up to 5 months) [1].

In two series of independent experiments carried out on the same samples, we measured the characteristic exponents $\zeta \sim 0.25$ and $\mu \sim 0.6$ governing static domain wall roughness [2], and the non-linear response (creep) of domain walls when subjected to a small applied force, respectively [3]. These results give rise to a clear physical picture of domain walls in ferroelectrics as elastic sheets in the presence of "random-bond" disorder, and where dipolar interactions play an important role, effectively increasing the dimensionality of the system, in agreement with theoretical predictions.

[1] P. Paruch, T. Tybell and J.-M. Triscone, APL **79**, 530 (2001).

[2] P. Paruch, T. Giamarchi and J.-M. Triscone, PRL **94**, 197601 (2004)

[3] T. Tybell, P. Paruch, T. Giamarchi and J.-M. Triscone, PRL **89**, 097601 (2002).

SPS Award for Applied Physics, sponsored by Unaxis

Giacomo Scalari is Italian. He obtained his laurea in fisica with "marks 108/110" at the University of Pisa in 1999 and the PhD in 2005 with a thesis at the Institut de Physique of the University of Neuchâtel under the supervision of Prof. Jérôme Faist. Before attending the mesoscopic physics group in Neuchâtel, Dr. Scalari worked on the development of innovative micro-instrumentation for surgery at the Scuola Superiore S. Anna in Pisa. At present, he is pursuing his research work as a post-doc in Faist's group. The work of Giacomo Scalari led to the first demonstration of a quantum cascade laser based on a bound-to-continuum transition operating at Terahertz frequencies and above the technologically important temperature of liquid nitrogen. By investigating the confinement effects in QCLs induced by a magnetic field, in a second line of research he has been able to extend the operation of these devices up to wavelength of 220 μm , the longest demonstrated to-date.

Magneto-spectroscopy and development of terahertz quantum cascade lasers

The first research line of this work has led to the demonstration of a THz quantum cascade laser based on a bound-to-continuum transition [1]. The device was the first one to operate above the technologically important temperature of liquid nitrogen. A further development of the bound-to-continuum design has led to laser action with high power (50 mW) at different wavelengths (87-130 μm). In the framework of a collaboration, such devices have been employed by Agilent Technologies to demonstrate THz imaging at different wavelengths.

The second research line has been focused on the magneto-spectroscopy study of the THz quantum cascade lasers and on the development of devices specially designed for operation in a magnetic field. With this approach it has been possible to extend the frequency operation of the quantum cascade laser down to 1.39 THz (220 μm wavelength), the lowest demonstrated to-date. The confinement induced by the magnetic field radically modifies the physics of the system allowing laser action with extremely reduced threshold current densities (less than 1 A/cm^2) [2] and leading to the demonstration of a two color THz quantum cascade laser.

[1] G. Scalari, L. Ajili, J. Faist, H. Beere, E. Linfield, D. Ritchie, and G. Davies, "Far-infrared ($\lambda = 87 \mu\text{m}$) bound-to-continuum quantum-cascade lasers operating up to 90 K", *Appl. Phys. Lett.*, vol. 82, no. 19, pp. 3165-3167 (2003).

[2] G. Scalari, S. Blaser, J. Faist, H. Beere, E. Linfield, D. Ritchie, and G. Davies, "Terahertz emission from quantum cascade lasers in the quantum Hall regime: evidence for many body resonances and localization effects", *Phys. Rev. Lett.*, vol. 93, pp. 237403-1, 237403-4 (2004).



The SPS Award winners 2006: Giacomo Scalari, Patrycja Paruch and Christian Rügge

New SPS Committee Members

At the general assembly of February 13, 2006 in Lausanne, three new committee members have been elected. Dr. Christophe Rossel is our new vice president, Dr. Pierangelo Gröning follows Dr. Tibor Gyalog as treasurer, who in turn has been elected as new president. In his four years as treasurer Dr. Gyalog was already very committed to various matters of the society, so the new function allows him to be even more involved for the benefit of the society. We thank the new members for their engagement and look forward to enjoy a fruitful collaboration.

We also want to thank the leaving members for their exceptionally enthusiastic participation in the committee.

Prof. Jean-Philippe Ansermet was member of the committee for 7 years, three as vice-president and since 2002 he was president of the society. During this time, some interesting and successful events took place, for example the World Year of Physics.

Prof. Andreas Züttel was the vice-president for two years. For professional reasons he chose to not continue his affiliation with the SPS committee.

With Prof. Ansermet, Mme. Claude de Titta steps also down from her duties as administrative secretary. She has happily agreed, however, to continue helping at the reception desk of our annual meetings. The new administrative secretary is Mrs. Sandra Hüni. She is located in Basel and will also be the personal secretary of the president.

Unexpectedly, Dr. Jacques Schmitt, chairman of our Industrial Physics Section, asked to be released from his duties because of personnel and professional reasons. We are very glad for having found a replacement, Dr. Ernst Ramseier from Leica Geosystems AG in Heerbrugg.

Vice President: Dr. Christophe Rossel

Born in Neuchâtel in 1952, married, father of two teenagers. Degree in Physics at the University of Neuchâtel, 1975. Master in Science (MSc) at Temple University, Philadelphia, USA, 1976. PhD in Physics at the University of Geneva, 1981. Postdoctoral fellow and scientific associate at the University of California San Diego, UCSD, La Jolla, USA, 1982 - 87. Research staff member at the IBM Zurich Research Laboratory, Rüschlikon, since 1987.

His fields of expertise in experimental condensed matter physics are mainly magnetism and superconductivity (Chevrel phases, Heavy Fermions and high temperature cuprate superconductors), low temperature physics, transport and tunneling spectroscopy in metals and semiconductors. His recent research on advanced functional materials has focused on switching phenomena in oxide-based non-volatile memories as well as on structural and electrical characterization of high-k dielectrics and metal gates for CMOS technology.

He is the author of more than 130 articles in scientific journals, and among other honors, recipient of an IBM Research Division Award (1988) and Outstanding Technical Achievement Award (1997). Next to his engagements as co-chair of several international conferences and workshops he was also scientific advisor of the European Institute of Technology, Paris (1987-92). As elected Executive Secretary of the European Physical Society (EPS, 1999-2004) he gained much experience in international science policy and in the internal operation of a learned society. He also reactivated its Technology group, of which he is still member. He is Fellow of the Institute of Physics (IOP, since 1999), long time member of the Swiss (SPS) and American (APS) Physical Societies, member of the



Material Research Society (MRS, since 2002), of the IBM Material Research Community (MRC) and Council (MRCC, 2003). In addition he is active as co-editor of the New Journal of Physics (since 1998) and of Europhysics News (since 1999). As founding member of the WYP2005 International Steering Committee, he took a very active role in the planning and organization of the international year of physics. At the Swiss level he shared the coordination of the WYP2005 national activities and headed the Swiss Talent Search program.

As part of the Swiss Academy of Sciences, the Swiss Physical Society is expected to play an important role in coordinating and supporting the activities of all physicists in Switzerland. Its annual meetings are excellent opportunities to bring experts and younger physicists together in order to share not only their scientific work but also their professional concerns and visions. Nevertheless a learned society can prosper only if it has enough members and is taken seriously by the concerned scientific community, at all levels from the professor, the professional scientist to the student. In order to be an added value to its actual and potential members, the SPS needs to redefine its role in education, basic and applied research as well as in technology transfer. Its impact on national scientific affairs must be enhanced to give the physicists the right lever to defend their interests. In this respect the dynamics generated by the WYP2005 must be carried on in the coming years to give the SPS the position and strength it deserves and to maintain the tight links existing with the EPS.

Some other important issues are:

- *to encourage further young people to study physics. This can be done by directly addressing physics teachers and by organizing well designed outreach activities for the public.*
- *to increase the number of SPS members by special discounts and programs for young physics students.*
- *to debate on the interdisciplinary aspect of physics in science and its role in our society and culture.*
- *to help defining ethical standards for scientific work and publications in order to maintain the credibility of our scientific community.*
- *to strengthen the links to the industry.*

I shall do my best, in my new position as vice-president, to help reaching these goals.

Treasurer: Dr. Pierangelo Gröning

Pierangelo Gröning was born in 1958 in Solothurn. He received his master in Electrical Engineering from the Engineer School Biel/Bienne (CH) in 1981. In October of the same year he joined Brown Boveri Company (later ABB) where he developed electronic high power converters for railway locomotives. After five years in industry he went back to academia and studied Physics and Mathematics at the University of Fribourg (CH), where he obtained his PhD in 1993 for his work on the adhesion of titaniumnitride and titaniumcarbide on stainless steels. From 1993 to 2002 he was staff scientist and head of the cold plasma technology group at the University of Fribourg. In 2002, he joined the Swiss Federal Laboratories of Materials Testing and Research (Empa), where he set-up a new research section active in solid state physics and in organic and inorganic nanostructures on surfaces. His scientific interests include carbon based nanoelectronics, molecular-self assembly on surfaces, electronic structure of quasicrystals and complex metallic alloys, and cold plasma processing. He is co-founder of the Nanotechnology Commission of the Swiss Academy of Engineering Sciences and of the International Master's Degree Program in Micro and Nanotechnology at the University of



Applied Science Vorarlberg (A). Since April 2006 he is head of the Advanced Materials and Surfaces department and member of the board of directors at Empa.

It is a great honor to be elected into the SPS committee and take over the responsible task of the treasurer. It is especially gratifying for me in this position to be able to actively support the activities of the Swiss Physical Society. With the advent of nanotechnology as an interdisciplinary approach to control matter and processes on the atomic and molecular level, I see a major challenge in the education and promotion of creative scientists, innovative engineers and a highly skilled work force. This in view of the fact that industrial and technological processes are more and more based on the latest findings in physics and chemistry combined with high level engineering. It will be of outmost importance that people being experts in their different disciplines are to communicate and work together as most of the future technological developments will need a highly multi- and interdisciplinary approach. Therefore, government, industry and university bodies should foster collaboration among themselves in order to educate people in nanotechnology. In that respect the Swiss Physical Society can play an important role in the development of new education models adapted to the needs in nanotechnology. I personally believe that the SPS should be generally even more active in Swiss education and research politics.

Industrial Physics: Dr. Ernst Ramseier (ad interim)

Ernst Ramseier was born 1948 and lived his childhood in Grenchen, canton of Solothurn. He studied experimental particle physics at the University of Bern where he mainly worked on weak interactions and particle detectors. He received his Dr. phil. nat. with a thesis on holography for high-resolution bubble chambers in the group of Prof. Beat Hahn.

As a post doc he worked with teams of Bern at CERN, Geneva, on high-resolution bubble chambers for search of short lived and subionizing particles. At SIN, Villigen, he contributed to works on rare decays of the pion and the muon by developing and testing a BGO-scintillation calorimeter. First appointment in the telecommunications industry at Gfeller AG, Bern, for work on the optimization of mechanical ringers using optical holography to determine best bell geometry and acoustic measurement techniques for these systems as well as for hearing aids, developed by the same company.

In 1986 he joined Leica-Geosystems, at that time Wild Heerbrugg AG, where he stayed until now. His main work was/is on radiometry and infrared measurement techniques, on laser safety, where he is also a representative of Switzerland in the IEC TC76 laser standardization committee, on optical range finding, on digital magnetic compasses as well as on military projects.



It is a great honor for me to join the board of the Swiss physical society as a representative of the industry. Industry is an important employer of physicists and transforms many ideas created by physicists into products. These on the other hand should give the profits to further support research. Even if now dominated by marketing and economics, competitive new products are often very complex and need the collaboration of competent technological partners. Physics and chemistry are the basis of any such competence and their steady advancement is paramount for industrial development. Also these sciences should formulate clear statements of the risks of technologies as well as objectively prove and explain their validity and limitations to diminish over-regulations, often driven by fear of the public from the unknown.

I hope with my work in the SPS we can intensify the collaboration between universities, "Fachhochschulen", technical institutions and industry for the benefit of all.

The SPS Annual Meeting 2006 in Lausanne: New concepts attracting new people

Following the tradition of Neuchâtel in 2004, the annual meeting of the SPS served as platform for the three physics based NCCRs in Switzerland: MaNEP, Quantum Photonics and Nanoscale Sciences. During the plenary session on Monday afternoon, the NCCRs were presented in terms of overview contributions. Additionally Prof. André Rubbia presented the Swiss Institute of Particle Physics CHIPP, founded in 2003.

The contributions of these four Swiss Science networks gave a weight to the SPS meeting. We will try to keep momentum for every other year. The years in between will become also more topical, presenting those fields that are not covered by the NCCRs.

The interlace-session of the NCCRs gave a wide overview and therefore was very well attended. Overall, nearly 500 participants joined the meeting, which again surpassed our expectations.



The plenary session attracted a big audience.

Besides the traditional sessions ANDO and TASK the meeting offered an Industrial physics session on Biophysics and Industry. Another big success was the session on Magnetism and Spintronics on the Nanoscale. The excellent selection of invited speakers and the elaborate PR for this event attracted a big audience. The Plasma Physics Session was also very well visited, given that the CRPP was "at home" in Lausanne.

The prize ceremony was held during the plenary session by Prof. Piero Martinoli who also chaired the prize committee. The work packages selected for the prizes were all of excellent scientific quality and the short presentations given by the prize winners were very interesting.

The meeting organizers were disappointed about the participation of the high school physics teachers who were all invited to join the Teacher's afternoon. The program, designed after a proposition of physics teachers themselves was quite attractive. Representatives from CERN, Verkehrs-



The vendors exhibition along with coffee breaks was well visited...



...and so was the postersession during lunch on Tuesday.

haus, Technorama, Kindercity, PSI and NCCR Nano were invited to present their special offers for school excursions. With only 6 registrations there would have been more speakers than audience and we had to cancel the session.

With more than 120 participants the conference dinner had again more attendees than the dinners during the last few years. After a movie presentation, Christophe Rossel had the after dinner talk on the Swiss achievements during the World year of physics.

Last but not least, the corridor discussions on such a meeting are very important platform for scientific and friendly exchange of ideas. I heard many persons talking about the increasing quality of the presentations at SPS meetings. We hope that we will succeed in keeping the momentum to steadily increase both the scientific and the presentation quality of the SPS meetings in order to make these meetings more attractive to the physics community of Switzerland.

Prof. Jürg Osterwalder accepted to host the SPS meeting at the University of Zürich 20th to 21st February 2007. We are thankful and we are sure that this meeting will also be very successful.

Tibor Gyalog

Short Communications

International Workshop: Nanospectroscopy using Synchrotron Radiation

July 12th - 14th 2006, at PSI Villigen

Contact: charlotte.heer@psi.ch, further information: <http://nanospect.web.psi.ch/>

38th EGAS: International conference of European Group on Atomic Systems

7th-10th June 2006 - Ischia (Naples)

Information and registration: <http://egas38.na.infn.it>

Für eine Reform der Lehrerbildung

Der folgende Auszug stammt aus einer Pressemitteilung der DPG. Das Thema ist sicherlich auch für die Schweiz relevant.

Berlin, 2. März 2006 – Die Deutsche Physikalische Gesellschaft (DPG) spricht sich für eine grundsätzliche Reform der Ausbildung von Physik-Lehrerinnen und -Lehrern aus. „Bislang ist es üblich, die künftigen Lehrkräfte im Fach Physik gemeinsam mit den Studierenden auszubilden, die eine Karriere in Forschung oder Wirtschaft anstreben. Diese Zusammenlegung geht zu Lasten der Qualität der Lehrerbildung“, so Professor Dr. Siegfried Großmann, Co-Autor eines heute in Berlin vorgestellten Thesenpapiers der DPG. „Wir plädieren deshalb für ein Lehramtsstudium eigener Art, das sich an den hohen Anforderungen eines zeitgemäßen Schulunterrichts orientiert.“ In der heutigen Wissensgesellschaft gehöre das Verständnis von Naturwissenschaft und Technik zu den Schlüsselqualifikationen, meint Großmann. „Deutschland kann es sich im globalen Wettbewerb nicht leisten, seinen jungen Menschen etwas anderes als die optimal mögliche Schulbildung zu bieten. Das gilt besonders für den Physik-Unterricht.“ Der DPG-Experte betont die Verantwortung des Lehrberufs: „Das heutige Sozialprestige von Lehrerinnen und Lehrern steht leider im krassen Missverhältnis zu ihrer so wichtigen gesellschaftlichen Aufgabe.“

Der vollständige Text und weitere Informationen finden sich auf:

<http://www.dpg-physik.de/presse/pressemit/2006/dpg-pm-2006-003.html>

First European Forum on Physics and Society 19th to 22nd April 2006 in Graz (Austria)

Science in general and physics in particular is one of the basic elements in our culture that sustain our communities. It is also a prerequisite for basic job skills and many of our daily functions. Science and physics are also the foundation for the high technology revolution seen in our societies and the way such technologies influence other societal challenges such as environment, energy supply, and communication and production technologies.

Forum Physics and Society, composed of high level physics representatives from 20 European countries and 7 countries outside Europe has discussed the role of physics and its interaction with society. Switzerland was represented by our president Tibor Gyalog and by EPS past-president Martin C. E. Huber. The Forum, being part of the Austrian EU-Chair program, was cosponsored by the European Physical Society and the World Year of Physics 2005 initiative.

The Forum notes the major challenges facing modern science and thus also physics. Globalization is putting pressure on the “physics enterprise”. The linear innovation model was abandoned many years ago and more complex systemic models have been introduced changing the way knowledge is produced, applied and commercialised in social settings. OECD studies show that a falling share of new tertiary graduates chooses physics as their field of study. Recognizing the central role of physics in the innovation process, the Forum stresses the importance of strengthening physics as a field of study and as a scientific profession. The Forum notes that these challenges are of a global nature and express commitment to address the challenges in Africa. Other regions present similar problems. The Forum chooses to address five topics of importance for understanding the role of physics in society: culture, competitiveness and technology, funding structures, and educational and ethical issues.



Revisorenbericht 2005



Revisorenbericht zur Jahresrechnung 2005

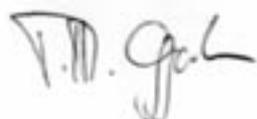
Die Jahresrechnung 2005 der SPG wurde von den unterzeichneten Revisoren geprüft und mit den Belegen in Übereinstimmung befunden.

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

Für die SPG:

Der Präsident:
Prof. J.-P. Ansermet

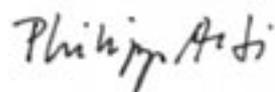
Der Kassier:
Dr. Tibor Gyalog



Die Revisoren der SPG:

Prof. Dr. P. Aebi

MER Dr. A. Pochelon



Basel, Neuchâtel und Lausanne, 30.03.2006

Ausschreibung der SPG Preise für 2007

Auch im Jahr 2007 sollen wieder SPG Preise, die mit je CHF 5000.- dotiert sind, vergeben werden.

- ◇ SPG Preis gestiftet vom Forschungszentrum, ABB Schweiz AG für eine hervorragende Forschungsarbeit auf allen Gebieten der Physik
- ◇ SPG Preis gestiftet von der Firma IBM für eine hervorragende Forschungsarbeit auf dem Gebiet der Kondensierten Materie
- ◇ SPG Preis gestiftet von der Firma Unaxis für eine hervorragende Forschungsarbeit auf dem Gebiet der Angewandten Physik

Die SPG möchte mit diesen Preisen junge PhysikerInnen für hervorragende wissenschaftliche Arbeiten auszeichnen. Die eingereichten Arbeiten müssen entweder in der Schweiz oder von SchweizerInnen im Ausland ausgeführt worden sein. Die Beurteilung der Arbeiten erfolgt auf Grund ihrer Bedeutung, Qualität und Originalität.

Der Antrag für die Prämierung einer Arbeit muss schriftlich begründet werden. Die Arbeit muss in einer renommierten Zeitschrift publiziert oder zur Publikation angenommen sein. Der Antrag muss die folgenden Unterlagen enthalten:

Begleitbrief mit Begründung, Lebenslauf des Kandidaten mit Publikationsliste, die zu prämierte Arbeit, und ein Gutachten.

Diese Unterlagen werden elektronisch im "pdf"-Format direkt an das Preiskomitee eingereicht (große Dateien bitte komprimieren (zip oder sit)):

awards@sps.ch

Einsendeschluss: 01. November 2006

Die Preise werden an der Jahrestagung 2007 der SPG in Zürich überreicht.

Das Preisreglement befindet sich auf den Webseiten der SPG: www.sps.ch

Annnonce des prix de la SSP pour 2007

En 2007 la SSP attribuera à nouveau des prix de CHF 5000.- chacun:

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

La SSP aimerait saluer l'excellence d'un travail scientifique effectué par de jeunes physiciens ou physiciennes. Les travaux soumis à candidature doivent avoir été effectués en Suisse ou par des Suisses à l'étranger. L'évaluation portera sur l'originalité, l'importance et la qualité des travaux.

La candidature soumise à nomination doit être justifiée par écrit. Le travail doit avoir donné lieu à des publications dans des revues renommées ou avoir été acceptés pour publication. Le dossier de candidature doit comporter les documents suivants:

une lettre de motivation, le curriculum vitae des auteurs, une liste de publications, le travail proposé et une lettre de recommandation.

Ces documents seront envoyés électroniquement en format "pdf" directement au comité de prix (svp. compressez des fichiers très grands (zip ou sit):

awards@sps.ch

Délai: 01. novembre 2006

Les prix seront distribués à la réunion annuelle de la SSP 2007 à Zürich.

Le règlement des prix se trouve sur les pages Web de la SSP: www.sps.ch

Vorstandsmitglieder der SPG / Membres du Comité de la SSP

Präsident / Président

Dr. Tibor Gyalog, Uni Basel, tibor.gyalog@unibas.ch

Vize-Präsident / Vice-Président

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