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Dear reader,

in your hands you have the funniest Offspring issue ever! Well, whether this is really true, that's up to you to decide. The idea for the main topic of this issue came up in the final stage of creating the last issue realizing that we were always having so much fun in making the Offspring we thought we should probably go for something funny for the next issue. Dealing with "humor in science", this issue presents several articles on the humorous sides of everyday scientific life (have you ever heard about Powerpoint karaoke? Or of a professor explaining Physics to you using examples from superhero comic strips?), a scientific view on humor itself (by analyzing the wellknown joke of the horse in the bar), and also a funny view of the scientists themselves by seeing them through the eyes of children.

Apart from the fun part, this issue as always also covers what is going on in the PhDnet: You will read about last year's achievements and get an idea about future plans and developments, presented by the former and the current Steering Group. In addition, we are reporting about several PhDnet-wide events that took place in the past year, like the General Meeting in Jena, and interdisciplinary meetings such as the workshop in Bonn and the IMPRS symposium in Munich, but also about the activities of a smaller group of PhD students travelling to South America to teach children about astronomy, and a PhD student's experiences with daily life in Korea.

We also encourage you to take part in PhDnet activities yourself - in this issue you will learn about upcoming events, finding information on the PhDnet wiki and other ways to communicate within the network. And probably after reading this issue, you would also like to participate in the creation of the Offspring itself - don't hesitate to contact us with your ideas, articles or just feedback on the current issue, or, better yet, become a member of the editorial board! At this point, we would also like to take the opportunity to thank everyone who contributed to this issue by providing articles, pictures, ideas and inspiration – your input is essential for keeping the Offspring alive!

Your editorial board



A look Leonard Burtscher Spokesperson of the PhDnet 2009 back ...

2009 was again a very active year for the PhDnet: We published another issue of the Offspring, launched a very successful PhDnet survey and organized an interdisciplinary workshop. We increased networking collaborations with other organisations and gained media attention with our survey of the German political parties. And, at the end of the year, we staged our annual General Meeting at which the President, Prof. Gruss, increased our budget threefold! You will read more about these and other PhDnet activities on the following pages – and additional information can also be found on the PhDnet wiki (see page 16/35). There you can also see preliminary results from the PhDnet survey $(\rightarrow \text{Questionnaire}_\text{group})$, the final report will be available there in October.

There was one big issue, however, that we couldn't resolve: the inadequate insurance situation for stipend holders. Learning about the details of the situation and getting involved in (or at least informed about) the discussions within the MPS takes a lot

from left to right: Susannah Burrows (CPT-Representative); Axinja Hachfeld (Humanities-Representative); Leonard Burtscher (Spokesperson) of time. We had to realize that, within only one year, the PhDnet does not have a big impact on the multi-year decision processes at the MPS-level and beyond.

If we want to influence the negotiations that affect our working conditions - and I think we should! - we need to find a way to pass on not only the expertise that we gather in one year but, more importantly, also the exact state of these negotiations to the next generation of the PhDnet. How can this be achieved? The best solution that we could think of was to initiate a new transitional period of at least one month following the election of new PhDnet officers, during which the previous year's officers can pass the torch. It is a pleasure to see how actively the new Steering Group is picking up the negotiations at the state where we left them.

I would like to end by thanking all the 2009 PhDnet volunteers, but especially my Steering Group colleagues Susannah Burrows and Axinja Hachfeld!

... and Daniel Kalthoff Current Spokesperson of the PhDnet forward

Humor is a strange thing. Although everyone is equipped with some sense of it, humor is extremely difficult to grasp. Have you ever tried to explain a joke to a colleague, who just didn't get the point? Understanding humour requires reflection and knowledge – on social and cultural backgrounds – and it challenges your analytical skills.

It's like basic science: You're trying to understand a fascinating phenomenon, you want to break it down to fundamentals. Eventually, you may succeed and find an answer to your question (not without raising ten more, of course). The lucky thing about science: your insights do not at all diminish the fascination - they may even increase it. Not so the joke: After your elaborate analytical dissection, it's just not funny anymore.

More relevant, humour is an essential part of social interaction. Laughing is healthy, strengthens team spirit and helps to overcome embarrassment – it simply facilitates communication. This is the reason why networking is so much more fun in person! Promoting communication between and improving education of Max Planck PhD students are explicit aims of the PhDnet. Thanks to the approval of our budget, we are able to support even more events that pursue this idea - whether it is "global" events like this year's "Everyday Science" or soft skill training organized locally.

Less personal - but no less powerful networking can be supported by social networking platforms. Therefore, we established a collaboration with the General Administration on the formation of a new "MaxNet" – a Max Planck wide social networking platform that may boost virtual "PhDnet-working" in the future.

Declared and quoted by several former spokespersons, it is "the most important job to keep the network alive." I can only encourage you to participate in it, get involved and share your ideas – advanced life support has never been so much fun!

Introduction of the new Steering Group

At last year's PhDnet General Meeting in Jena, a new Steering Comittee was elected which took office on the 1st of January 2010. Through the newly established transition period we got down to business smoothly and were greatly supported in this by Leonard Burtscher, Susannah Burrows and Dorothea Hämmerer, whom we would like to thank very much for their commitment.

Steering Group 2010

Section Representative Chemistry, Physics and Technology: Veronika Bierbaum studied Physics in Freiburg and Copenhagen. In her thesis at the MPI for Colloids and Interfaces in Potsdam-Golm, she is employing statistical physics to elicit the operating principles of molecular motors.

Section Representative Humanities: Alexander Jehlin studied Business Administration and Economics in Passau and London. Since May 2009 he is investigating legal changes in German business taxation at the MPI for Intellectual Property, Competition and Tax Law in Munich.

Section Representative Biology and Medicine: Stephan Klatt studied Molecular Biology at the TU of Braunschweig. He is working on protein expression for medical diagnostics in his PhD thesis at the MPI for Molecular Genetics in Berlin.

PhDnet Spokesperson: Daniel Kalthoff studied Physics and Medicine in Mainz. His doctoral research is about functional brain connectivity in the field of neuroimaging at the MPI for Neurological Research in Cologne.

Budget 2010

At the 2009 General Meeting in Jena, President of the Max Planck Society P. Gruss offered financial support for the PhDnet activities. We came back to this offer and presented a budget proposal early this year, which was finally approved in its entirety of 27.500 \in . Adding an annual



donation of the German Federal Reserve, the PhDnet 2010 is now equipped with a budget of $37.000 \notin$ to fund its activities with a special focus on soft skill seminars. At this point, we want to strongly encourage you to make use of this opportunity. If you want to organize a workshop or seminar and need support, check our wiki pages or contact T.Fellinger, from the Seminar Group (see page 35).

Exchange inside our network...

Distributed amongst 80 institutes, more than 4500 PhD students pursue their doctoral research within the Max Planck Society and constitute the PhDnet, that aims for exchange, education and representation of doctoral interests. In order to support these goals on a local and "global" scale, we have been discussing the idea of a PhDnet social networking platform and believe that it would make the PhDnet an even more active and vivid community. Adapted to the PhDnet's structure, it can simplify and support a variety of vital networking processes such as event notifications, discussion forums, online surveys, etc. We pushed at an open door when we contacted the MPS General Administration with this idea, as they are currently negotiating with ResearchGATE to relaunch a Max Planck-wide social networking platform. We

were invited to take a hand in shaping this new 'maxNet' and make it fit the PhDnet's demands and we would be pleased to hear your ideas and visions regarding this.

...and beyond.

Throughout the years, the PhDnet has established and fostered contact to other doctoral networks such as THESIS e.V. or the Helmholtz Juniors. In addition - due to initiatives like last year's survey of the German political parties - the PhDnet is slowly gaining attention as a reasonable partner to be consulted in questions of the PhD student's situation and education. We are still at the beginning of this, but improving our political standing will provide the opportunity to actively influence the long-term perspectives and future situation of junior researchers in Germany. Therefore, we want to further the exchange with other networks, political parties and institutions. In order to act and react on related developments from a broad base, an online networking platform is a great chance for more participation, discussion and democracy within the PhDnet.

ELMHOLT

PHDmet

The PhDnet Philipp Altrock wiki pages

The PhDnet has two web sites that serve different purposes. The first one, "www.phdnet.mpg.de" adapts the corporate design of the web appearance of the Max Planck Society (MPS) and gives only very general information about our network.

The second website is the PhDnet wiki (www.phdnet.mpg.de/wiki), that serves as an interactive platform for all PhD students/scholars within the MPS. Although its content mostly addresses current grad students, an interested applicant can also find valuable information. This article provides you with an introduction to the basic features of the wiki. The goal is that passive visitors get to information faster and that active users are encouraged to help improve the wiki.

Every MPI/IMPRS PhD student can become active by getting an account and is encouraged to do so if she/he thinks that improvements can be made or more information is necessary. Mostly, members of working groups of the PhDnet use the wiki to store information and coordinate their work. A very important fact to realize is that every document, once uploaded, is bound to stay on the web practically forever. In addition, on a MediaWiki like ours, documents could be accessed by third parties. Keep this in mind when uploading sensitive content and consider other channels to share sensitive documents!

Getting an account is very easy. Just click on "login/create account" on the top right of the page (see green box in the picture), choose "create account" and finally choose your login details.

On the main page, the first things that come into sight are items that link to the most important pages within the wiki. Very fundamental for the PhDnet is the link right below these items, highlighted in red. It directs you to a (still incomplete!) "List of all PhD representatives". You are most welcome to add missing institutes with their representative(s) or provide updates, as this list is essential to the PhDnet (Comment from the editorial board: We also use this list to distribute the Offspring to the different institutes, so please keep the name of the representative and the approximate number of PhDstudents at your MPI upto-date!)

To the left, all the content of our Wiki can be accessed through the navigation bar. You find links to the workgroups there, as well as tips for editing the wiki (as a registered user), a few external links, and the "toolbox".

Each workgroup is supposed to have a public part and a namespace part. The latter is to be edited and read only by members of the particular workgroup. Becoming a member of a namespace needs to be arranged for each user individually upon request by other users with special permissions (e.g. administrators, the web group).

In general, editing and generating new content requires very basic coding skills. It always helps to search for already existing code and maybe copy and paste some of this code to then change the content. We are looking forward to your contributions to this important platform that serves to optimize the situation of all PhD students of the MPS.

For further help and information, or for suggestions and constructive criticism on the PhDnet's web appearance just contact members of the web group (see page 35 for contact details).



The PhDnet General Meredith Schumann Alexander Schwarzkopf Meeting 2009

From October 29-31, 2009, 86 PhD students representing 49 of the 80 Max Planck institutes gathered in Jena. For a party? Yes, at the oldest planetarium in Europe – it was a good time – but more importantly, to discuss common interests and concerns at the 8th PhDnet General Meeting.

Since its foundation in 2002, the PhDnet works at enhancing the communication among students as well as between students and the MPS. In addition, it has also worked to engage the public, e.g. defending the role of the MPS in German graduate education (see Science vol. 319, p. 396 and 320, p. 872) and asking German politicians for their positions on issues concerning young researchers (http://jrresearchersgermany.wordpress.com/2009/09/21/).

Each year, the annual General Meeting culminates in a discussion with MPS representatives which was led in 2009 by MPS President Gruss himself. PhDnet's focus since 2008 has been the status of MPS researchers receiving stipends, a topic that was also discussed on the General Meeting this time. The percentage of MPS PhD students supported by stipends (vs. work contracts) has increased from 23% in 2005 to 50% in 2009, according to PhDnet annual surveys (see below).

Stipend holders receive at least as much net pay as contract holders but they are not covered by the accident and disability insurance provided in contracts. The MPS is working to provide secure and affordable solutions for stipend holders, and PhDnet tries to ensure that students' interests are addressed during this process. Information on this and other issues addressed at the 2009 General Meeting is in the preliminary meeting report (\rightarrow Wiki \rightarrow Meeting Group). Vital raw material for all issues engaged by PhDnet is provided by the PhDnet's annual survey: the data necessary to represent students. The 2009 survey covered ca. 50% of MPS PhD students, with participants from all 80 institutes. Preliminary results are available on the PhDnet wiki (\rightarrow Wiki \rightarrow Questionnaire group).

In addition to all the discussions, the science part was not neglected during the meeting: Invited speakers taught participants about topics as diverse as the MPS itself: politics, cosmology, the Gaia hypothesis, and olfaction.





Invitation

You often wonder whether your MPI is the only MPI out there? You always wanted to know what people from MPIs at the other end of the country do? You sometimes wonder if other PhDs have the same issues that you or your institute's PhDs have? You are a newly elected PhD representative and longing to learn about the experiences of other PhDs? You always wanted to discuss hot topics concerning PhDs with the president of the MPS? You are interested in achieving soft skills for your professional life and

your work as a PhD representative?

You would like to play an active part in the PhD network (PhDnet) of the MPS? You always wanted to enjoy some nice days with PhDs from other institutes in an amazing town?



If all of this or parts of this is you or you have her reasons to be interested, then come to the

9th PhDnet General Meeting October 12th - 15th 2010 at the MPI for Physics, Munich

All PhD representatives and other interested PhD students from Max Planck Institutes are invited to join!

More information on the PhDnet General Meeting can soon be found under http://www.phdnet.mpg.de/Munich2010

The Max Planck PhDnet meeting group invites you to the 9th PhDnet General Meeting, which serves as a platform to improve interdisciplinary cooperation, optimize scientific exchange between PhD students and strengthen team spirit. An important component of the meeting will be the discussion of important issues for PhD students brought to the General Assembly by PhD representatives of the Max Planck institutes and the election of the new steering group.

New frontiers Leah Sharp Carlos G. Acevedo-Rocha in science

The traditional scientific disciplines of physics, chemistry, and biology are insufficient to define the diversity of ideas being pursued by modern scientists. Today, we have physical chemistry, material science and synthetic biology, to name just a few of the new interdisciplinary fields currently being investigated. To stay up to date with scientific progress and to develop critical analysis skills, IMPRS students from Molecular and Cellular Life Sciences and Advanced Photon Science traversed Munich last summer and fall to partake in the second IMPRS Interdisciplinary Symposium 2009 "New Frontiers in Science".

To promote the communication between biologists and physicists, a one-day workshop was held at the MPI for Quantum Optics in Garching in July. During this workshop, students presented their research in small, emboldening groups, with plenty of time for in-depth discussions and exchange of ideas. Physics subjects included "Lasers"; "High-Precision and Ultrafast Spectroscopy", "Ultra-high Intensity Interactions", and "Attosecond Physics" whereas biology talks spanned "Biochemistry", "Neurobiology and Cell Biology", "Structural Biology" and "Neurobiology and Molecular Medicine". Afterward, a "Grillparty" was thrown for participants to continue fostering the relaxing atmosphere.

The year 2009 marked both the 200th anniversary of Charles Darwin's birth and the 150th anniversary of the publication of his treatise, "On the Origin of Species", as well as the "International Year of Astronomy". With this in mind, stimulating talks such as, "Echoes of creation: the origin of structure in our Universe" (Prof. Simon White, MPI for Astrophysics) and "Molecular Darwinism: strategies of molecular variation" (Nobel Laureate, Prof. Werner Arber, Univ. of Basel) were presented. In addition, a deeper view of the microcosm was exemplified with the talks, "Beauty and fitness for purpose with the building blocks of life, the architecture of proteins" (Nobel Laureate, Prof. Robert Huber, MPI of Biochemistry) and "Quantum Information" (Prof. Gerd Leuchs, MPI for the Science of Light).



Science is a critical resource for building a sustainable future. The nature and complexity of global challenges requires the development of a new set of approaches and practices within the scientific community, based, more than ever, on cooperation. Thus, we have a responsibility not only as citizens, but also as scientists, to our environment. This was elegantly highlighted with the lectures, "Science as a profession" (Prof. Georg Kreutzberg, MPI of Neurobiology) and "Academic responsibility and our future" (Nobel Laureate, Prof. Richard Ernst). Sustainability means meeting the needs of today without compromising the ability of future generations to do likewise. To further investigate this important issue, the lecture "Power generation by nuclear fusion" (Prof. Sibylle Günher, MPI of Plasma Physics) and the panel discussion, "Sustainable energy supply for the future" stimulated interactions between professors and students, who came from all over Germany and represented all natural science disciplines.

The symposium also presented the importance of transdisciplinarity by exploring the intersection of art and science at the Max Planck Headquarters. Highlights included a journey from Heisenberg to Humboldt and beyond with the lectures, "Quantum, cosmos, light, life, memory history and

sustainability" (Dr. Helmut Rechenberg, MPI for Physics), "Friedrich Schiller: Poet, Physician and the 'Body and Mind' Question" (Prof. Georg Kreutzberg, MPI of Neurobiology), "ASIA projects for Tibetan nomad children" (Dr. Wolfgang Schweiger, Asia NGO), and "Passions beyond science: Tibetan painting art and pigment analysis by Raman spectroscopy" (Prof. Richard Ernst, ETH Zurich). Following an afternoon of stimulating talks, the participants explored the exhibition, "Dance in Morpho Space" (Prof. Harald Fuchs, Univ. of Applied Sciences, Düsseldorf) at the ERES Foundation. To conclude the evening, a small panel discussion was held to explore the question, "What is Life?" from a historical and philosophical perspective, based on Erwin Schrödinger's seminal book.

The "New Frontiers in Science" concept promotes the collaboration of professionals with largely different languages, backgrounds, training, and expertise to tackle problems whose solution extends beyond a single discipline. As exemplified by the sheer number and diversity of Max Planck Institutes and International Max Planck Research Schools, the force towards interdisciplinarity is driven by scientific progress itself. Have you ever wondered what is happening in the world outside of your lab? Or even outside of your institute?

Well, we are pleased to present you with the

3rd annual IMPRS Interdisciplinary Symposium 2010 'New Frontiers in Science'

taking place on **Thursday, 11 November** at the MPI for Physics,

and on **Friday, 12 November** at the LMU Aula in Munich.

Join us for stimulating presentations and a panel discussion with outstanding leading scientists, including several MPI directors, Leibniz and Nobel Laureates. Topics range from cutting-edge research in physics, biotechnology and medicine to the role of science in society.

For more information, check out our website: www.imprs-interdisciplinary-symposium.com

The voices of Planck and Einstein in Katrin Strauss your GPS navigation system!?

Have you ever wondered why mankind developed the concept of music, what a shooting star and your TV at home have in common or why the invention of our GPS navigation system would have been impossible without the theories of Planck and Einstein? Questions too absurd to ask? Too easy to answer?

During the 5th Interdisciplinary PhDnet workshop of the Max Planck Society more then 20 PhD students ventured into exactly these questions. Between June 4th and June 6th 2010 they gathered true to the motto "Everyday Science – a lab in our backyard". Hosted by the MPI for Radio Astronomy in Bonn, the workshop was organized by committed PhD students from different Max Planck institutes.

Like for the previous Interdisciplinary Ph-Dnet workshops the central question was: Why does mankind undertake science? Is it for money? Or for fame? Maybe. But more likely it is because of our curiosity – a feature that makes us human and that drives all our investigations and explorations. This curiosity should not stop at the boundaries of our own scientific field. That becomes even more obvious when we try to bridge the gap between basic research and the application of science in our everyday life. Just as you were told as a kid: "You don't learn for school – you learn for life."

During the workshop students of 10 nationalities and 14 institutes of all three MPS sections gathered to explore "the lab in our backyard" by presenting their own scientific work and background in talks and posters. But instead of being lost in translation while explaining details they creatively adapted their presentations to a scientific but non-expert audience true to the motto "Everyday Science".

And not only PhD students were attracted by this challenge. Three leading researchers of the MPS also contributed in making this event a success. Dr. Seth Davis, group leader at the MPI for Plant Breeding Research, explained how studying light perception in plants can help to learn more about prevention of jetlag – an issue interesting for all conference hopping scientists. Prof. Dr. Christoph Engel, director at the MPI for Collective Goods, combined criminology and experimental economics to investigate prisoners' behaviour. Finally, with Prof. Dr. Michael Kramer, director at the MPI for Radio Astronomy, we discovered our daily life through the eyes of Planck and Einstein.

And as the lively discussions during the presentations proved; the concept is wellreceived. But this eager scientific exchange did not stop after leaving the lecture hall. During the visit for Europe's largest radio telescope in Effelsberg the workshop reached its highlight. Here the students could experience an "ear to the universe" face to face.

Conclusion:

What happens when an Indian physicist explains to a Mexican biologist and Krgyzstani anthropologist how plasm is captured in the shadow of a candle light? We understand how diverse science can and should be! Moreover, we are sensitized to discover the interdisciplinary contact points of various disciplines – connections that become more and more important in a scientific culture of specialization. So if your mind becomes troubled by all the questions raised, if your curiosity is aroused, then you will be already well prepared for the next Interdisciplinary PhDnet workshop of the Max Planck Society.



The MPG Nina Gaißert Science Express

For the "Science Year 2009", the Max Planck Society developed a science train to present cutting-edge research and technology in a creative and interactive way. Within 12 converted train cars 10 different research fields were presented, e.g. bioand nano-technologies, brain function and cognition, and digital society. The train was equipped by several Max Planck institutes as well as universities and industry partners and was designed by the ArchiMeDes agency. Over 216 days the train stopped in 62 cities all over Germany and made it possible for more than 250.000 visitors to get an impression about what our world might look like 20 years from now.

PhD students were asked to attend the train during the stay in their town to look after the exhibits and to answer visitors' questions. It was great fun to explain my own research to totally different groups of people: 6-year-old pupils, shy or cheeky, or even 80-year-old grandpas, but it was also a challenge to find the right words for these different audiences. My attention was especially caught by semi-permeable glasses that can replace

windows of office buildings and directly convert sunlight into electricity, thus the whole office building becomes a huge solar cell; whole new city concepts that integrate a whole city within one building; a demonstration of plastics which can take on two distinct forms over a known time frame, a technology which is now used in minimally invasive surgery techniques; and many more. On one computer it was possible to access the internet, search for a webpage, and simultaneously trace the information between the server, the intermediate nodes and the final client. This trace and the corresponding geographic locations were displayed on a big rotating globe in real-time.

Finally, the last car was aimed at kids. Here they could learn about complex research by playing and performing experiments on their own. All visitors were fascinated by the outstanding design of the train. Thus the train's aim to make science attractive for thousands of people was successfully fulfilled.

Some thoughts Marc Geibel On humor

What is humor? Humor is definitely something that nobody would like to live without. It is something like Nectar and Ambrosia for the soul. But describing humor in one sentence is approximately as hard as launching a nuclear submarine in a tea cup. And it becomes even more incomprehensible because most of us use humor a little more frequently than a submarine. The author E.B.White once said: "Humor can be dissected as a frog can, but the thing dies in the process and the innards are discouraging to any but the pure scientific mind."

If you agree, skip the next lines and carry on with the next article. We are able to walk on the moon and to develope digital cameras that can destiguish a human face from a half-rotten horseradish. so a human being should also be able to describe one of evolution's big gifts that differentiates him from a toad. But being an indiviual everybody has his own understanding of humor. Sure, there are similarities, otherwise the exchange of humor would not work.

There are also some geographical and ഫലിതം 幽默 humor Humor umore मज़ाक el humor юмора دعاية el humor

cultural characteristics of humor like e.g. the "black humor" for which the British are famous.

Some sorts of humor are quite obvious - sometimes even too obvious for some of us - like a stall joke. Other forms are very unobstrusive and and their aftermath takes some time and also some special sort of detector in our brains. So for some of us they will not work at all and leave us with a glance of incomprehension in their faces. There is even a sort of humor that bystanders would identify more as an assault. It feels more like an experience of defamation and name-calling. But people exchanging this strange kind of humor actually don't feel offended at all. They rather seem to enjoy it.

Seeing all these different excrescences of humor can leave one wondering: Is there a sort of humor that most - if not all of us - understand and that we all like? Is there something like a universal kind of humor? A ubiquitous lock pick to mankinds heart?

http://www.expedition-zukunft.org/

"A horse enters a bar..." Franz M. Janson Mark C. Turpin Thomas Q. Wagner Scientific humorism

Everyone knows this joke.¹ But what is the decisive central humorous element, called "nucleus humoris"² among experts? Is it the alienating expectation of the horse to be perceived as a regular custumer after entering the bar? Does this joke presuppose knowledge of the socio-cultural interaction between the homo sapiens and the equus baculus? Is one startled that the barkeeper anticipates that the horse has cognition and comprehension of his idiomology (and implied imagery)? Certainly not! All of these ostensive imponderabilia lose their humoristical impetus due to the unreflected acceptance of the joke-imminent "narrative surrounding".3 So how could these 14 words evolve to such a popular joke?

Humorism faces these and other questions in order to enunciate substantiated hypotheses, theses and answers. It uses strict philological analysis but does not eschew the composition of interdisciplinary research groups with subjects like biology, medicine or other disciplines with an empirical character.⁴ Current emphases of the inductive based science are research projects like "Bilingual point-transition", "Diachronic synopsis of ethnic ribaldry"or "Deconstructivistic analysis of transcendent meta-humor".

All of these advanced disquisitions refer back to the fundamental definition of humor itself. Even though this still evokes many controversies, the working hypothesis of the authors⁵ is widely accepted amongst experts - albeit in order to avouch compatibility and reproducibility of scientific results. Despite perpetual debates on principles, first results are fortunately available. In our introductory example the humoristic momentum is based on the fact, that the idiomatic phrase used by the barkeeper is a surprisingly exact description of the horse's physiognomy. Here the fundamental discernment is revealed. In all cases that have been analyzed the nucleus humoris exists in the momentum of surprise⁶ and thus represents at least one absolute term that is inherent to every joke.

6 American colleagues have coined the term "Epiphany of Surprise".

A look at scientists -Julia Steinbach through the eyes of children

After that scientific take on humor, let's change the point of view and take a look at the humorous view of science, or at first, at the scientists themselves! The following pages show some drawings that children (aged 9 to 11) made to express what they think a scientist looks like – you may decide whether you can identify with any of the pictures!

These pictures were provided by two different projects that are aiming to give children a first hand look at the scientific world and to make them see that research can be interesting and even fun.

The black-and-white pictures are provided by Sally Soria-Dengg, regional coordinator of the CarboSchools project, an EU-project that links researchers from several leading carbon science laboratories in Europe with teachers and pupils from secondary schools. Over the course of the project, scientists and teachers co-operate over several months to give young people practical experience of research through true investigations and interactions with real scientists. Pupils get practical experience of research by conducting experiments on the impact of greenhouse gases and learn about climate research.

 \rightarrow http://www.carboeurope.org/education/

The colored pictures are provided by Kate A. Furøy, editor of the Nysgjerrigper magazine. 'Nysgjerrigper' is the Norwegian word for a very curious person who is not afraid to ask questions and who wants answers to everything he or she wonders about. The Nysgjerrigper project was initiated by the Research Council of Norway to show elementary school children that research can be fun. It is promoting interest in research in general as well as focusing on selected topics, and seeks to open the eyes of young people to the potential of a career in research. The idea of the Nysgjerrigper method is to present science in schools not in the form of results, but to encourage children to experience their own 'research' as a creative activity that challenges them to formulate questions and to think about potential explanations.

 \rightarrow www.nysgjerrigper.no

For those who don't:"...and the barkeeper says: Why such a long face?"
cf. Warum steht ein Pils/z im Wald – Kleines Handbuch des Humors, brsg. Janson/Turpin/Wagner, München, Bangkok: Ridens-Verlag
Ibid.

⁴ Exemplary in this case was Dr. Dr. A. Blatts cooperation during his 2nd dissertation "Is there a primal humor? With the neighbouring discipline "Meta-Humor" and the research group "systematic analysis of laugther as a derivative of humor".

⁵ cf. Janson/Turpin/Wagner: Definitio Humoris, in: Humor ist, wenn man (trotzdem) lacht? – Tagungsbericht zum Symposium Graz 2009, hrsg. E. von Rumsch, Dresden: Mailbeck 2009



The Physics of Julia Steinbach Roberto Kretschmer Superheroes

Everything I learned about science, I learned from comic books - James Kakalios



One day, author James Kakalios, professor at the University of Minnesota, overheard his students grumbling about the standard examples from the introductory physics class being boring and of no use in "real life".

Being a fan of comic books, he therefore decided to replace inclined planes, pulleys and harmonic oscillators by examples from superhero comic books – with the effect that "interestingly enough, my students never wonder when they will use this information in real life", which "as a lawabiding citizen, fills me with great sense of security because I also know how many of my scientist colleagues could charitably be termed mad".

In this book, the author manages to give a profound introduction of Physics – ranging from Newton's laws of motion via electro- and thermodynamics to quantum mechanics and solid-state physics – with examples from comic books. With his funny style of writing, his readers as well as his students "are so busy eating their superhero ice cream sundaes, they don't notice that I [Kakalios] am feeding them their spinach."

Looking at the physics behind Superman, Spiderman et al, one gets to know the true cause for the destruction of Superman's home planet Krypton and finds out who really killed Spiderman's girlfriend Gwen Stacy. Besides, the author shows that – usually except for one little "miracle exception" that give superheroes their powers at the beginning – comic books get the physics surprisingly right! Sometimes, comics were even ahead of science in explaining physical effects, e.g. in quantum mechanics* or string theory.

Furthermore, James Kakalios not only explains the principles of physics, but also tries to explain what it means to be a physicist: It's not about knowing a vast number of equations or performing complex arithmetic in one's head at enormous speed – but more about finding and asking the right questions.

Another nice aspect for "scientific insiders" is how the author shows how comic books sometimes also get the world of scientists right (e.g. "all professors are white men and around 800 years old"). Besides, the reader (at least if he/she is a comic novice like us) learns a lot about superheroes (did you know there was a superhero called 'the Atom'?), the history of classic comic books and how comics reflected some typical aspects of science or society in their time.



More about the book on the webpage: *http://www.physicsofsuperheroes.com*

* More about quantum mechanics you also can learn from Kakalios' upcoming book "The Amazing Story of Quantum mechanics" which will be released October 2010.

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I'm an alien – _{Nina Gaißert} in Seoul

It's night time, but it is not dark, not dark at all, as I walk along Cheonggyecheon-River, which is actually not a river, it is some water pumped through downtown, but bordered by pavement and some trees. And actually strolling here is quite nice. The water is illuminated in different colors.



Nina Gaißert is a (German) PhD student at the MPI for Biological Cybernetics in Tübingen, where she is investigating how humans judge similarities of 3D objects using vision, touch or both. To create stimuli for her experiments using a 3D printing technology, she spent one month at the Korea university in Seoul, where her supervisor helps to build up the Department for Brain and Cognitive Engineering.

Moreover there are thousands of flickering screens, billboards and other advertisements glittering high above me on the facades of the skyscrapers. And I am humming Sting's song "Englishman in New York", although actually I am a little blond girl in Seoul, South Korea. Yes, I feel like an alien here, Europe does not feel closer than Mars. Ok, alien is pretty lyrical and since I am a scientist I should probably say: "I feel like a pop-out effect". Ever crossed a street surrounded by a hundred Asian guys? One blond head amongst a hundred black-haired people. Ok, some call their hair color brown, but I cannot recognize the difference, sorry.

And moreover I cannot recognize any of the street signs. Where am I? Where is the next subway station? Who should I ask? I try to find a girl, not too young, since the young ones only start giggling, and no guy, since most guys feel offended when I directly approach them. Ok, back in the subway. From here I will find my way back home. I've never seen a subway system that well structured, the signs are very clear, and luckily in Korean and English, the trains are on time and everything is perfectly clean. And luckily no one stares at me, everyone is busy watching TV on their cell phones. Ah no, there is a little kid, she is staring at me, eyes and mouth wide open. I am probably the first blonde she has seen, not on TV, but in real life.

Half an hour later I arrive at the restaurant where I want to meet my friends. All Koreans are on time, already sitting around the table, shoes standing next to the door. Everyone is still wearing their jackets. Did I mention that it is minus five degrees outside? And the door is open, as usual. This is something I will not get accustomed to. But I will get accustomed to the food. We will either have Korean BBQ, ember in the middle of the table, a plate of raw meat, and several hot sauces, you grill your own meat and wrap it up in sesame leafs, delicious, or Shabu Shabu. I love Shabu Shabu. It is a huge pot of hot soup (remember it is minus five degrees outside), and you get a plate of different things along with the soup, as well as scissors. With the scissors you cut what you like into the soup, boil everything

and eat it, delicious. Yes, they always use their scissors. I have never seen a knife in a Korean restaurant. And Shabu Shabu has a big advantage: you see what you get, before it is cooked. So it is easier to choose if you want to eat the giant squid (sometimes served still alive) or the sea cucumber.

Yes, I think I will get accustomed to Korea, a nice and safe country, with friendly people. Maybe I will dye my hair brown, to feel less like a pop-out effect. Luckily I am not tall, this would be harder to change. And maybe one day I will even learn to speak some Korean words.

An-nyeong-ha-se-yo!

PhD students in the Max Planck society come from all over the world – that gives us the unique opportunity to broaden our horizon and to learn about other cultures, and also helps to see our own culture from outside. If you are a foreign PhD student in Germany or a German PhD student visiting another country, feel free to share your experiences with us – write us about your encounters with a different culture and how you felt about it!

PowerPoint-Karaoke: A practical guide to do fun Corinna Handschuh Stuff with your research

Last December Leipzig witnessed the pre- revolutionary insights even to the people inter-MPI-PowerPoint-Karaoke battle.

PhD students from all three local MPIs met on this occasion in order to compete against each other. The rules of this "sport" are quite simple. Everyone wanting to take part was asked to bring a short slide presentation that they had prepared for a past conference or the like. These presentations were then randomly assigned to PhDs from one of the competing institutes.

Afterwards, everyone had five minutes to present the slides assigned to them, however, without having previously seen the slides and being from a completely different field. The talks that followed offered a new perspective on the presented topic, and sometimes provided

miere of an extraordinary event: The first whose original research was presented. Afterwards the interested audience had the opportunity to address the speaker with questions about their presentation. None of the speakers had to face the awkward silence often seen after papers at scientific conferences, but was instead bombarded by questions. Especially the provided graphs, formulas and example sentences lead to revolutionary new interpretation of the research data that was presented on the slides.

> Some of the inspiration for these new insights might have to be attributed to the shots of vodka that were offered to the speakers in advance as liquid courage in order to loosen their tongues. Although some people were reluctant at the beginning, most PhDs eventually took the stage,

and two hours filled with entertaining talks went by very quickly.

When all the presentations had been given, the audience was asked to vote for their favorite presen-

tation. Just like at any major sports event, the bronze, silver and gold medalists were honored with a valuable memento. Maybe one of the beautiful certificates will even be added to a future job application by one of the winners. Since there had been so many remarkable presentations, there was a tie for most of the places. In the end five lucky winners, which were quite evenly distributed over all institutes and genders, shared the applause.



This humorous take on the often oh so dry reality of PhD research was definitely more than just a fun way to spend an evening. PowerPoint-Karaoke is a good opportunity to practice one's presentation skills and ability to speak freely in front of an audience. We highly suggest that other cities take up the idea to have an interdisciplinary event between the local MPIs, and maybe one day the national MPI-PowerPoint-Karaoke-Championship will take place.



We all live under Víctor Silva Aguirre the same sky

Report on the Galileo Mobile Project.

It is hard to write these lines now after what has happened in the last two years. When I look back to the beginning of all this, it seems somehow surreal; trying to explain the whole thing in a few simple lines ends up in a mixture of reality and perceptions that even for me is hard to disentangle. That's the effect this project had on me, and I'll try to share this experience with you in the following paragraphs.

It all started on a normal day at work at the institute when I received a forwarded email through the PhDnet from an (at the time) unknown student from Lindau, who had the most simple but beautiful idea I had heard about in a while: within the frame work of the International Year of Astronomy 2009 and the 400 year anniversary since Galileo Galilei first pointed a telescope towards the sky, why don't we make a trip through South America with telescopes and learning material, and teach children about astronomy? It was like a bell ringing in my head. Before I realized what was going on, I had already replied to the email saying I was interested in the project. Others did as well, and we formed a team of 12 people from different countries and fields (called "Galileros"), coordinated by the not-unknown-to-meanymore PhD student Philippe Kobel.

Of course the whole idea developed into something much more sophisticated than originally thought of. Thanks to our sponsors, we managed to get a 30cm telescope to do observations of stars and a smaller one for the sun, and replicas of the original telescope used by Galileo (the Galileo-scopes) to give away in every school we visited. We prepared many hands-on activities in Spanish and English to do with the children, contacted the schools and teachers in the cities we wanted to visit, and gathered all the didactic material we could to give away to the kids.

Months of hard work resulted in the definition of the itinerary, which took us

from Antofagasta in the north of Chile through the desert in San Pedro de Atacama, up the Andes to Colchane and next to the Pacific ocean in Iquique, crossing salt flats towards Bolivia to admire La Paz, sailing in Lake Titicaca to find the floating islands of the sun. Struggling for air in Peru while climbing up to Puno, just to be amazed by Cuzco and the ancient Inca culture, which gently pointed the way back south to the marvels of Arequipa, the mystic of Tocopilla and the final closure in Taltal, Chile. All together, over 5.000 kilometers of experiences and learning.

It is impossible to express in a few lines what we saw and felt while we were there. I must say that I still don't know if I taught or learned more, but probably the latter. We visited over 25 schools, reaching more than a thousand children. To make our experience long lasting and valuable for future generations of "Galileros", a film crew traveled with us during the full extension of the project and a documentary with the outcome will be released by the end of the year. So stay tuned! Now, through this small review the Galileo Mobile Project goes back to its origins: the PhDnet. When it started here, the trip was only one step away.



Is there a life Julia Steinbach after deadlines?

No matter whether you need to compile an abstract for a conference, submit a paper for a special issue, write a report, or in the end finish your PhD thesis – deadlines are everywhere in your scientific life. And they all have one thing in common: they are usually at the wrong time. Either they tend to accumulate all in the same week or they are just too early. Not much too early though - you would just have needed a little bit of additional time, just one more week or even one more day to finish some calculation, to decide what to present at the conference, to further develop that great idea you just had for the paper. Or it is just the timing - you are just really busy with other stuff this week, next week would be no problem...

So, why are deadlines always at the wrong time? And is there such a thing as the perfect deadline? During the creation of the past issues of the Offspring, we also had the opportunity to experiment with the deadlines that we gave to people for writing articles. (We had quickly discovered that giving no deadline at all and saying "just send us something when you have time to write it" doesn't work, un-

fortunately.) Of course, in the beginning we had some ideas how the perfect deadline should be – don't give the people too much time, because then they tend to forget about the topic, but also don't make the time too short, then they will consider the deadline unrealistic from the beginning on and will not start working at all, hoping for an extention. Well, no matter how we set the deadline, whether people had just one month or half a year for their articles, we got most of the articles in the last week before the deadline, or we were asked in that week for an extension - of just an additional week, or just a few additional days. And also my own experience from that was that no matter how much time I had, I usually wrote my article on the last day before the deadline (and sometimes, when the date fell together with some other deadlines, this day was not enough - so I also just needed a little bit more time....)

So, what do we learn from that? First: If you set a deadline for something, set it to at least one week before the date where you actually need it. Okay, most people already suspect you do it like that and thus expect having an additional week anyway – so you might decide how much more additional time you want take into account for that. Second: When being inside a more or less realistic range, the length of time until the deadline doesn't really matter. So, don't think too much about the perfect deadline, just set one!

To get back to science – when you try to remember how it was with all the deadlines...in the beginning, you were probably just angry and stressed about the deadline being at the wrong time, but looking back you will realize that you were productive in the last week before the deadline. And you have to admit that you would have needed much more than that week for the work that you have done if there had been no deadline. So, next time do not be angry about the deadline, just keep in mind that deadlines are good for your scientific productivity! Probably one could go even so far to say that there would be no science without deadlines...



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YOUR SHRINKING SENSE OF HUMOR FROM CHEEKY TO GEEKY IN JUST SEVEN YEARS



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