



seit 1558

Friedrich-Schiller-Universität Jena

# Annual report

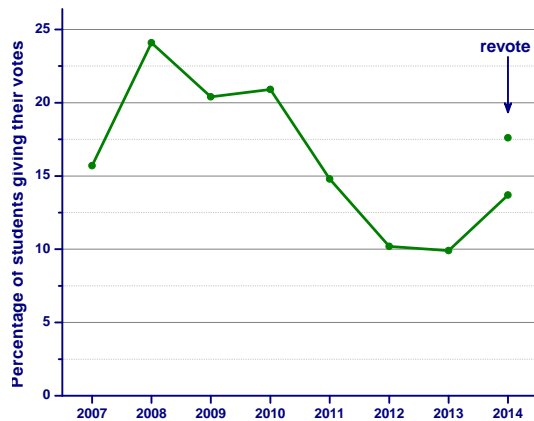
OF THE PAF STUDENT COUNCIL

Faculty of Physics and Astronomy  
Friedrich Schiller University Jena

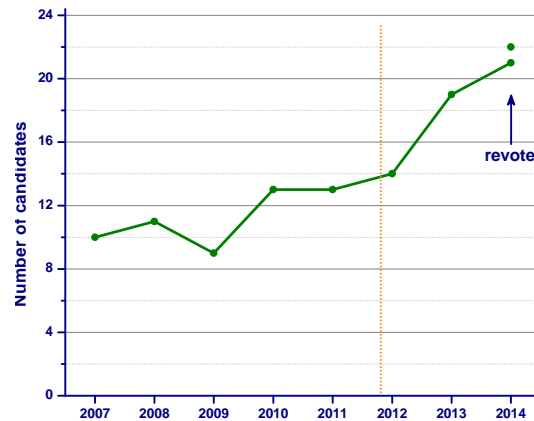
**PAF** **f**achschafft  
Physikalisch Astronomische Fakultät

# 1 The FSR and what we do

The student council of the Faculty of Physics and Astronomy – referred to as FSR (for "Fachschaftsrat") – is a group of 15 students, elected each year. There were 21 students standing for election in 2014, and about 14% of the PAF student body were giving their vote. As one can see in the two graphs below, the relative number of voters slightly increased in comparison to the past two years. Besides, we notice the strictly rising number of candidates, giving us hope for the future to achieve a larger recognition of our work among the student body.



Percentage of students giving their votes in FSR election over the past eight years.



Number of candidates over the past eight years. In 2012 (orange dashed line) we set the number of members from nine to fifteen.

Because of some contradictions between our electoral rules, determined by the student body in December 2013, and the regulations of the university student council we had to repeat 2014's election, and the constitution of the new FSR had to be shifted to January 2015. Unfortunately, it is not possible to include a quotation for teaching degree, material science and B.Sc. students. In the following we list the names of old and newly elected members of the PAF student council.

## Members in 2013/14:

- Eric Abraham
- Tim Barth (until Nov. '14)
- Nils Becker
- Eduard Betko
- Julius Biedermann (until Nov. '14)
- Sven Buder
- Hannes Damm (treasurer)
- Mark Kremer
- Hoàng Lê (until Nov. '14)
- Amadeus Müller
- Michel Pannier (chairman)
- Kevin Prast (until Nov. '14)
- Stephan Siewert (budget official)
- Sebastian Ulbricht
- Richard Wiedenhöft

## Members since January 2015:

- Eric Abraham
- Nils Becker
- Eduard Betko
- Sven Buder
- Hannes Damm (treasurer)
- Annika Gambke
- Maximilian Keller
- Mark Kremer
- Silvia Kunz
- Lukas Jonas Maczewsky
- Michel Pannier (chairman)
- Stephan Siewert (budget official)
- Sebastian Ulbricht
- Richard Wiedenhöft
- Anna Katharina Wölfl

We are facing a large spectrum of responsibilities. A small overview of tasks is shown below:

Help & advice	University policy & networking	Events & projects
<ul style="list-style-type: none"><li>• offering general help</li><li>• talking to lecturers</li><li>• providing forwarding to competent offices</li><li>• collecting lecture notes &amp; old exams</li><li>• taking care of new students</li></ul>	<ul style="list-style-type: none"><li>• representing student interests</li><li>• working in the faculty's bodies</li><li>• organizing the lecture evaluation</li><li>• Zusammenkunft aller Physikfachschaften (ZaPF)</li></ul>	<ul style="list-style-type: none"><li>• orientation days for new students</li><li>• tutorials, courses</li><li>• student-professors-meeting</li><li>• sport tournaments</li><li>• "Ersti-Fahrt", excursions, etc.</li><li>• parties, etc.</li></ul>

A huge part of our work consists of communication with institutions of the faculty (such as the Dean's office, the Office for Student Affairs or "ProQualität Lehre" – especially the regular talks with the Dean have shown to be very fruitful for both of us) and sending student representatives to other councils (such as the university student council *StuRa*, the *FSR-Kom*, the council of the faculty or the committee for lecture evaluation). During the lecture period we coordinate our work in weekly sessions, open to public. Furthermore we offer two or more visiting times per week for students looking for advices or searching for old exams.

For further information (e.g. about our meeting and visiting times or upcoming events), questions or help, please contact us:

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## 2 Lecture evaluation

Each semester the FSR organizes an evaluation of all lectures at the PAF (including several service courses of other faculties) in cooperation with the *Universitätsprojekt Lehrevaluation (ULe)*. The evaluation aims the assessment of quality and professional level of the lectures seen by the viewpoint of students and gives rise for the lecturers to take a critical review of their teaching. At the same time it gives an orientation for students, for instance when choosing physical elective courses.

On basis of the evaluation the FSR gave the **student body teaching award** in winter semester 2013/14 to Prof. Frank Schmidl for his lecture in physics for medical and dentistry students ("Physik für Human- und Zahnmediziner"); additional acknowledgements for exceptionally good teaching were given to Jun.-Prof. Szameit and Dr. Undisz. In summer semester the award was given to Dr. Claudia Schnohr, whose lectures in nuclear physics ("Kernphysik"), as well as her seminars in experimental physics for biologists, chemists, ... ("Experimentalphysik für Biologen, Chemiker, ...") achieved marvellous ratings.

The complete evaluation can be found at the Dean's Office, the physics library and the FSR office; moreover you will find it online via our website.

## 3 Orientation days for new students and "Ersti-Fahrt"

As every semester the FSR organized orientation days for new physics students (1st/2nd April & 1st-3rd October), offering introductions to study regulations, university life and *Friedolin*, as

well as a city tour and visits of the institutes of the PAF. Unfortunately, we recognized an alarming small number of first semester students: 7 B.Sc. in Physics students in summer term (who actually appeared to the lectures – in fact there were 26 matriculations) as well as 33 B.Sc. in Physics, 27 Teaching degree and 14 B.Sc. in Material Science students in winter term. The reasons for this unexpected decrease might be the elimination of tuition fees in the western states, the results of the last CHE ranking, the decline of the birth rate or an insufficient marketing of our faculty.

New features since last winter semester are for one thing our own introduction course to *Friedolin*, and for another thing the brochure "Studienführer der Fachschaft Physik", which summarises most important information for the newcomers.

As every year, we also invited our new students for a weekend trip to Niederkrossen, called "Ersti-Fahrt", this year from 7th to 9th November.

## 4 ZaPF and BuFaTa MatWerk

The **meeting of all physics student bodies** (referred to as ZaPF for "Zusammenkunft aller Physik-Fachschaften") takes place every semester; this year the physics student bodies of Düsseldorf and Bremen organized the conferences in May and November. Of course we participated in both of them and joined work groups dealing with B.Sc. and Teaching degree programs of study, CHE ranking, budget cutbacks, system accreditation, communication to other student bodies, female quota and many other topics. Especially there was a discussion, initiated by members of our delegation, about the lowering of mathematical learning in the German Abitur and its consequences for beginning physics students; it might be continued at the next ZaPF in May 2015 in Aachen.

Furthermore, we hosted the **meeting of all materials science and engineering technology student bodies** (referred to as BuFaTa MatWerk for "Bundesfachschäftentagung der Fachbereiche Materialwissenschaft/Werkstofftechnologie") from 27th to 30th November in Jena. Here public relations work and recruitment of new materials science students were crucial topics, especially concerning the work of the jDGM ("junge Deutsche Gesellschaft für Materialkunde"). Other issues, such as system and program accreditation or how to organize such a meeting, have been talked over, too. The next BuFaTa MatWerk will be in Karlsruhe.

## 5 Excursions, tournaments and events

This year the FSR organized two excursions. The **two-day trip to Frankfurt a. M.** from the 19th to 20th May included visits of the *Gesellschaft für Schwerionenforschung (GSI)* in Darmstadt, as well as the *European Space Operations Centre*; in Frankfurt there were guiding tours at *Evonik Industries*, the experimental hall of the university (where they do astrophysical experiments with neutron sources and develop particle accelerators) and *Continental AG* (including cruising on their test route). On the 5th December there was a **tour to Dresden** with the opportunity to visit the *Helmholtz-Zentrum Dresden-Rossendorf* (seeing their radiation source "ELBE" and some particle accelerators), as well as the *Leibniz-Institut für Festkörper- und Materialforschung*, including a ride on their magnetic levitation train. We are grateful for the financial help, coming from the *Deutsche Gesellschaft für Materialkunde (DGM)*!

We usually try to organize at least one sport tournament each semester, where the teams can compete with each other in either football or volleyball. On the 21st June we arranged a **football and table football tournament** in cooperation with the Math student council; of course the winner teams were happy to get some nice prizes. Unfortunately, we were not able to find a sports hall for tournaments in winter 2014/15. However, finding a location for our **skat tournaments** was quite easy – the *Quergasse No. 1* is always ready for us reserving a whole floor –, so we arranged two of them in January and June. Although the **"Bierathlon"** we set up for July was not

well-attended, we might give it another try next summer.

A real highlight in 2014 was the **student-professors-meeting** on 26th June, where besides the usual culinary offerings (nitrogen-ice, sausages, beer, ...) and the handover of the student body's teaching award, there was a public viewing of the world football championship match USA versus Germany in the Jenoptik lecture hall.

On the very beginning of the year, more precisely on 6th January, we had a famous guest for the **physical colloquium**: Prof. Dr. Harald Lesch talked about magnetic fields in galaxies and galaxy clusters ("Entstehung und Entwicklung von Magnetfeldern in Galaxien und Galaxienhaufen"). Following our suggestion to invite Prof. Lesch, the faculty had more guests than the lecture hall could hold.

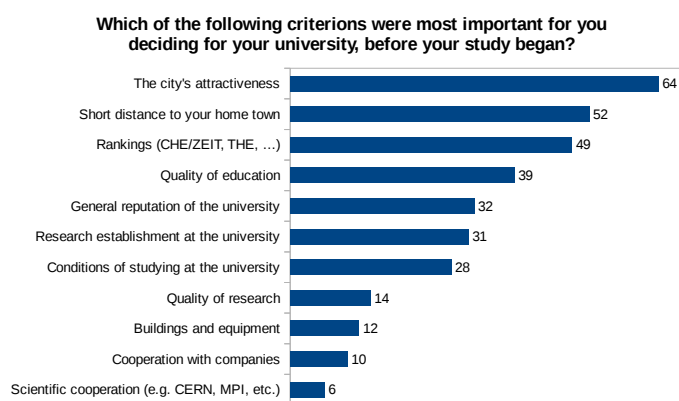
At the end of the year we decided to enlarge our traditional **Christmas session**, combining it with the Christmas parties of the *OSA Student Chapter* and the *Abbe School of Photonics*. We look forward to stay in contact with both of them.

Of course there were some other parties this year in cooperation with the student councils of maths, chemists, biologists and SciTec (from the EAH), located in the *Rosenkeller* or the *F-Haus*.

## 6 Other matters

This year, thanks to financial help of the faculty, we were able to hire a student assistant to establish an **online library for lecture notes and old exams**. We are looking forward for the programming work to be finished during the current year.

An important matter was the ranking of the B.Sc. in Physics and Teaching degree programs of study by the *Centrum für Hochschulentwicklung (CHE)* in November 2014. The significance of the **CHE ranking** for the decision of beginning physics students, which university to take, is illustrated in the graphic on the right: In the underlying survey of ZaPF and jDPG, which was carried out by us and partly analysed before waiting for the final results coming



up 2015, rankings were found to be the third most important reason to come to Jena (100 B.Sc. in Physics students were participating). Hence we worked out a presentation and visited some lectures to inform the involved students and motivate them to participate in the ranking. The results are planned to be published by the CHE in May 2015.

During winter term we had to face the results of a university-wide survey ("Zwischenbefragung"), revealing profound problems in our faculty's **teaching program of study**, especially an alarming dissatisfaction of the students with their workload. As a consequence work groups were established, dealing with the balance of theoretical and experimental physics, the quality and quantity of teaching methodology and practical matters, as well as the special role of the teaching program for regular school. Anyway, there is still a lot of work to do for next year.

Again, this year we arranged some **tutorials** for learning the proper handling of  $\LaTeX$ , *Mathematica* and, for the first time, also *Python*. As usual these courses were well-attended and will be offered each year (at least the first two). Of course we also supported *ProQualität Lehre* in getting up tutorials for theoretical and mathematical lectures.

Keeping an eye on the decrease of mathematical knowledge of beginning physics students, we suggested to offer another course of about two weeks, starting in September, even before the ac-

tual mathematical course – so to say a **pre-course** for the pre-course. We assured the Research Group for Teaching Methodology of our help designing a proper table of content for this pre-pre-course.

To improve the effectiveness of the **lecture evaluation**, we finally re-designed our questionnaires, removing some less useful points, adding a few indicators, and formulating them as statements rather than questions. We are planning to make use of the new forms for the evaluation in the upcoming summer semester.

In 2014 we also did some work on our **office and the student's common room**. Now our walls appear to shine white again, the PAF logo decorates our office, and we added some kind of counter as well as a comfortable sofa to the common room.

Besides all this there were some other events, we supported this year. We would like to briefly mention the theoretical physics spring school ("Perlen der Physik") in March, the "Hochschulinformationstag" and "Tag der Physik".