# Konstanz EPS Young Minds Section

Patricia Scheel

Leadership Meeting 2014 in Paris

06. June 2014

# Konstanz EPS Young Minds Section

- jDPG local group since 2007
- EPS Young Minds Section since April 2013
- 8 active members
- 5-6 events per semester





oung Minds

Karl-Philipp

Arne



Patricia



Florian



P. Möhrke



Martin



Alexander



Ulrike



Oliver



- Introduction to the research of our department and close interdisciplinary groups
- Information about career perspectives of physicists
- Excursions to industry and research institutions
- Events for first semester students
- Network activities
- Ο ...

# Beyond middle earth

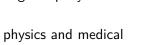


- Series of invited talks with 2-3 events per semester
- Especially organized for undergraduate students
- Goal: overview of the research of our department
- Additional lab visits for interested students



# Career perspectives of a physicist

- An invited speaker talks about his career and his actual work
- For further discussions and questions: A come-together after the talk
- First event: Career in a big company vs. own start-up
- Second event: Medical physics and medical technology
- Third event: Theoretical physics: Simulation of surface dynamics
- Further ideas:
  - Consulting
  - Automotive industry









### Zurich



- Two day excursion
- 11 students went to Zurich
- Visits:
  - ETH Zurich: Chair of system design (Prof. Schweitzer)
  - Lab visits in the group of Prof. Keller
  - EMPA
- Networking with the Young minds section Zurich





Eidgenössische Technische Hochschule Zürich Swiss Federal Institute of Technology Zurich



# EADS (now: Airbus Defense & Space)



- 20 students visited EADS in Friedrichshafen
- Tour through the information center and the industry site
- They had a look at the production of a satellite (cleanroom)
- Information about careers at EADS





### Nuclear power plant











- 36 students visited the nuclear power plant in Leibstadt
- Tour through the information center
- Walk over the areal of the power plant (cooling tower, cooling pond,...)
- Tour through the controlled zone inside the reactor

Patricia Scheel



- Two day excursion
- Networking with the other Baden-Württemberg jDPG groups
- Visits:
  - Fraunhofer IOSB
  - Bruker AG
  - KIT (Karlsruher institute of technology)
    - KATRIN
    - ANKA
    - Tritiumlab
    - Radiation research institute

#### Idea:

- Build a boat with given material, which can transport as much taws as possible
- Help the first semester students to get in contact with the professors
- Increase the visibility of the young minds section among the students
- Teams with up to 6 students
- "Competition" with two "expert" teams
  - PhD students who teach an exercise group
  - Professors









- Excursion to Zurich and visit the IBM research center
- Network meeting in Freiburg
- Cooperation with the JCF Konstanz (chemists)
  - Excursions: BASF, Paul-Scherrer-Institut
  - Christmas quiz
  - Volleyball tournament
- Further "beyond middle earth" and "career of a physicist" talks



# Year of Light (ideas)

- Action week with different talks
  - Starting talk in cooperation with the university theater (shadow play)
  - Some popular scientific talks about topics with social relevance(LED, communication, ...)
  - Some talks with research topics
  - And some talks combined with an event (planetarium, 3D cinema, ...)
- Eyecatcher
  - Light sculpture (art)
  - Bicycles with LED (in cooperation with the university bicycle rent)
  - Lightbridge (a laser crossing the river)
- Outreach
  - Build a spectrometer with high-school students

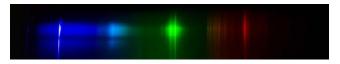


INTERNATIONAL YEAR OF LIGHT 2015





- Very simple and low-cost spectrometer
- But: Good resolution
- You need:
  - Gratings with 1000 lines/mm (  $\sim$  15€ / 28 pieces)
  - Slideframes ( $\sim$  2€ / 100 pieces)
  - Razor blades for the slit (  $\sim 2 \varepsilon ~/~ 10$  pieces)
  - Thicker paper (  $\sim 1 {\ensuremath{\,\in}}\ /$  5 pieces)
  - in total:  $\sim$  1 2€ per spectrometer





#### Thank you for your attention!