STUDENT'S POINT OF VIEW

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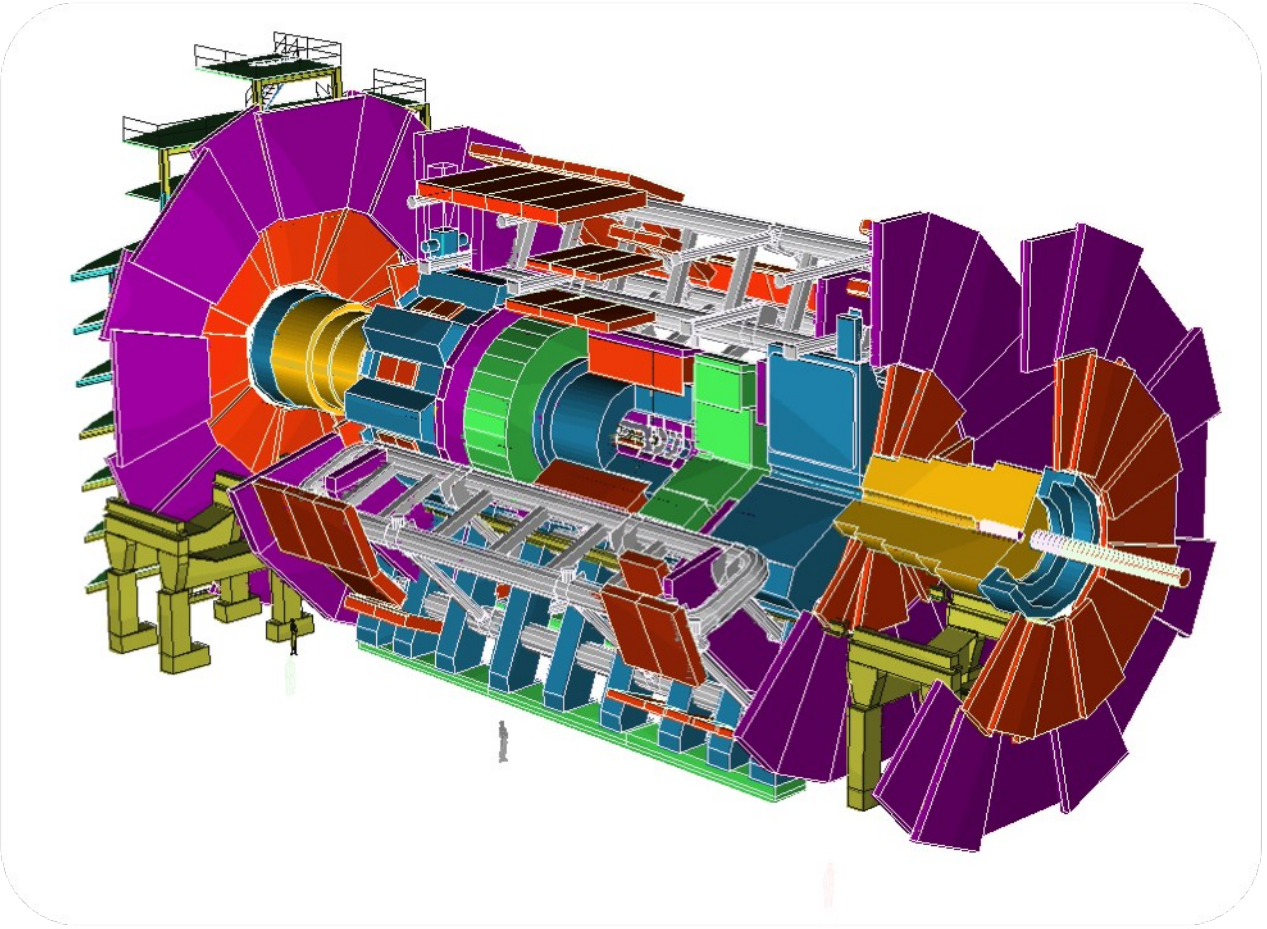
LHCb experiment

DISCLAIMER

- I wanted to present different “points of view” and possibly most objective opinions
- I consulted with colleagues from other experiments and other Universities/Institutes and added their remarks to the presentation

Thank You for Your nice cooperation and all comments!



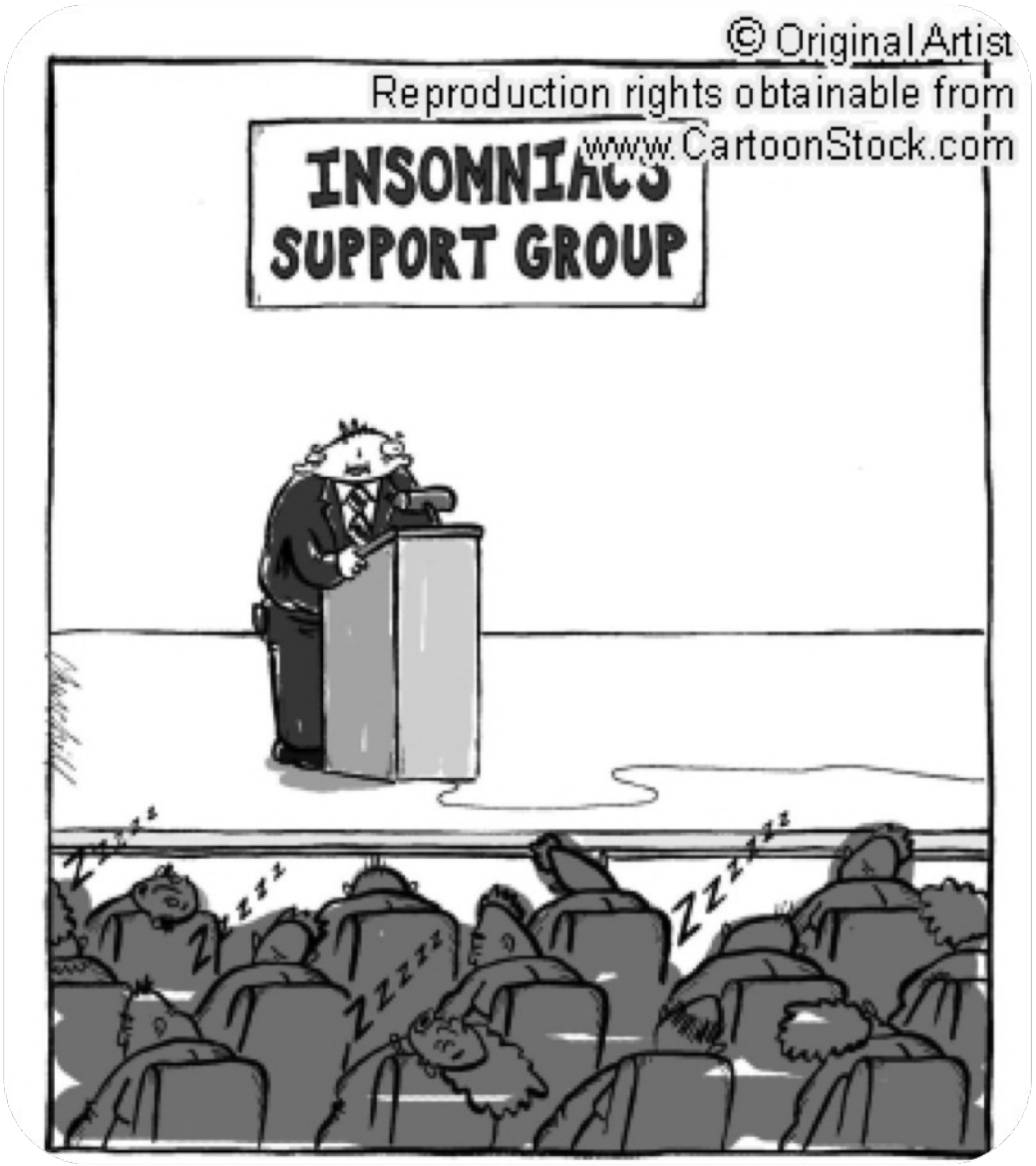
PHD STUDIES IN HIGH ENERGY PHYSICS

GENERAL INFORMATIONS

- **MSc studies** – 5 years
  - **Bachelor's** thesis - 4'th year
  - **Master's** thesis - 5'th year
- **PhD studies** – 4 years
  - **Entrance examination**: physics + english + presentation or research work
  - **Doctoral examination**: physics + language (english) + additional discipline (philosophy/economy)
  - **PhD thesis:**
    - 2 independent reviewers
    - the defense is done in a public presentation

HOW TO START WORKING IN HEP?

- **MSc studies:**
  - **High Energy Physics** (or related) specialization at MSc studies
  - **Individual** course of study
  - **Bachelor's** thesis
  - **Master's** thesis
- **PhD:**
  - **PhD studies**
  - PhD degree **without PhD studies**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LECTURES

ENGLISH

- **MSc studies:**
  - 1-2 year English course
  - final examination on C level
- **PhD studies:**
  - typically 2-year English course
  - sometimes no English course, but lectures in English
  - **it will be useful to extend English courses**
  - **technical English?**
  - **other languages (French, German)?**

PHYSICS LECTURES

- **MSc studies:**
  - HEP program at Msc studies
  - Individual course of study and summer schools
- **PhD studies**
  - General lectures in nuclear / particle / solid state / material / theoretical physics ...
- In our opinion particle physics / theoretical physics **courses should be extended** for HEP students
- In the same way **specialized lectures** in other disciplines should be introduced
- **Practical courses** needed (programming, data analyzing)

WORKING IN THE COLLABORATION

SPECIFIC CHARACTER OF WORK

- Not only **physics discoveries** but also **the latest technologies** in detectors, electronics and computer science (GRID)
- **Departures:**
  - conferences
  - shifts
  - internships
  - for University students a little difficulty because of didactics
- **Publications:**
  - In some experiments students/PhDs are automatically assigned to the list of authors
  - In other, they have to do additional shifts etc. to get there

FUNDING

SOURCES OF FUNDING

- **Scholarships:**
  - depends on the University/Institute
- **Individual grants from NCN:**
  - for departures, equipment, salary
  - example statistics for 2011 edition for NCN grants : 18 proposals accepted out of 47
- **Project 'group' grants**
- Other sources: University grants, additional scholarschips

THANK YOU FOR YOUR ATTENTION