# The DESY-ATLAS group.



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Beschleuniger | Forschung mit Photonen | Teilchenphysik

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#### **Group structure**

- DESY is split over 2 sites (Hamburg and Zeuthen)
- Also the ATLAS group is split over both sites with an approximate ratio HH:Zn=3:1
- The group currently consist of
  - 12 permanent+tenure track,
  - 23 postdocs,
  - 21 PhD students
  - plus master students, engineers etc.
- The Zeuthen part closely collaborates with Humboldt university
- There is some collaboration between the Hamburg part and Hamburg university
- > DESY also has a CMS group of similar size



## **Physics topics**

We work on the following physics topics:

- > Top quark measurements
- Searches for tt-resonances
- MC tuning
- Gauge boson production measurements and PDF fits (see talk by Voica)
- ➤ Higgs searches in H→γγ
- Supersymmetry with electrons, photons and тs (running out)



#### **Technical topics**

- Trigger
  - Trigger monitoring
  - e/gamma signature coordination (T. Kono)
  - e/gamma trigger performance studies
- Computing
  - Large Tier-2
  - Fast shower simulation
  - Smaller projects in core computing (DDM, PROC, MC production, Conditions DB)
  - MC generator maintenance



### **Technical topics (II)**

- > SCT
  - We are joining the present SCT to learn for the upgrade
  - As a start we took responsibility for the offline monitoring system
- > Pixels
  - Some involvements in running and IBL
- Upgrade (see talk by M. Stanizki)
  - We want to build one endcap for the SCT
  - R&D for the SCT endcap
  - Leading role in upgrade simulation



#### Possible areas of collaboration with KEK

- The most obvious area is clearly the upgrade
- We certainly would profit from some collaboration on the SCT
- In physics gauge boson production seems the most obvious
- We should explore if there are other areas

