

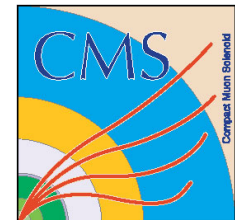


# **HRJRG III**

## **Contributions from DESY-YIG**

### **“Supersymmetry at the Terascale”**

**Isabell-A. Melzer-Pellmann**



# Contributors and Projects

## Hardware Project:

- Teststand for SiPMs – Upgrade of CMS HO Ring 0

## Manpower:

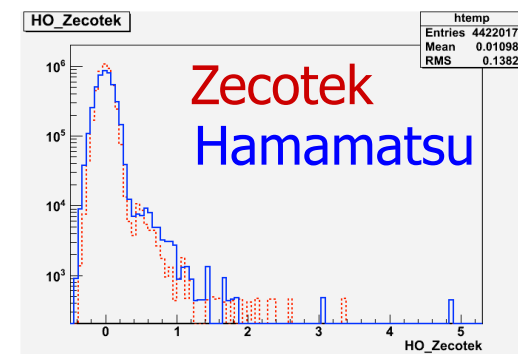
- Benjamin Lutz (DESY Fellow)
- Jakob Salfeld-Nebgen (PhD Student)

## Software Projects – HO related:

- Analysis of already available SiPM signals in HO

## Manpower:

- Altan Cakir (Postdoc in YIG)
- Jakob Salfeld-Nebgen (PhD Student)
- Study of improvement of jet reconstruction / MET resolution with working HO
- SUSY analyses using improved MET reconstruction (di-lepton analyses with muons and electrons)



# Connection to MSU



Calculations in CompHEP from MSU to produce LHA files

- LHA files can then be analysed with CMSSW by YIG
- Results on these can then be used for the LC calculations

# Contributors and Projects



Software Projects – HB related:

- Study possibility of improving Particle Flow Energy resolution with segmented HCAL
- (Reminder: Improvement of Calorimeter-only energy resolution with weighting was shown, but Particle Flow is still better)
- Manpower: ???