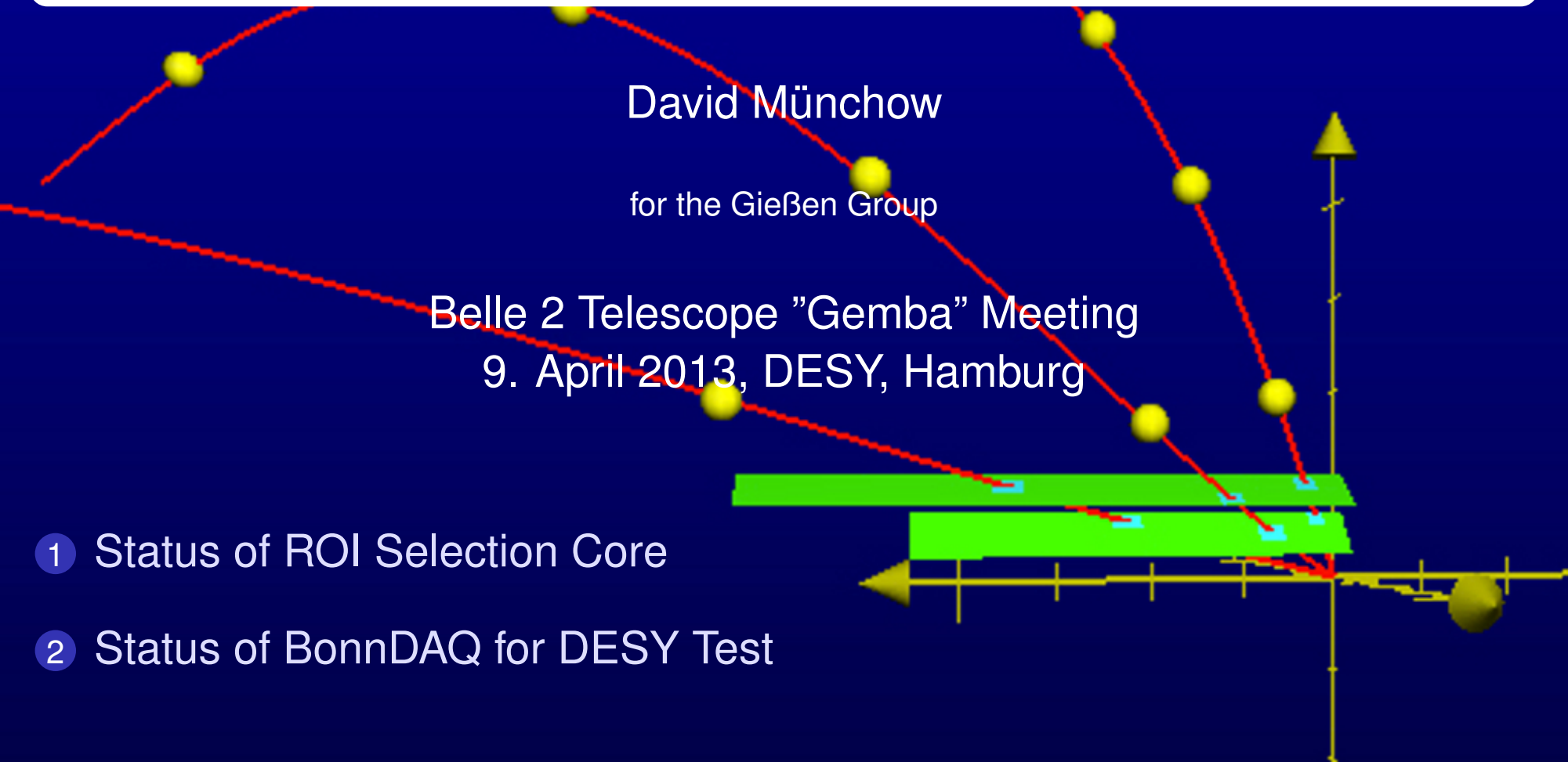
JUSTUS-LIEBIG-UNIVERSITÄT GIESSEN

II. Physikalisches Institut

Bundesministerium für Bildung und Forschung

ROI Algorithm Status and BonnDAQ Status



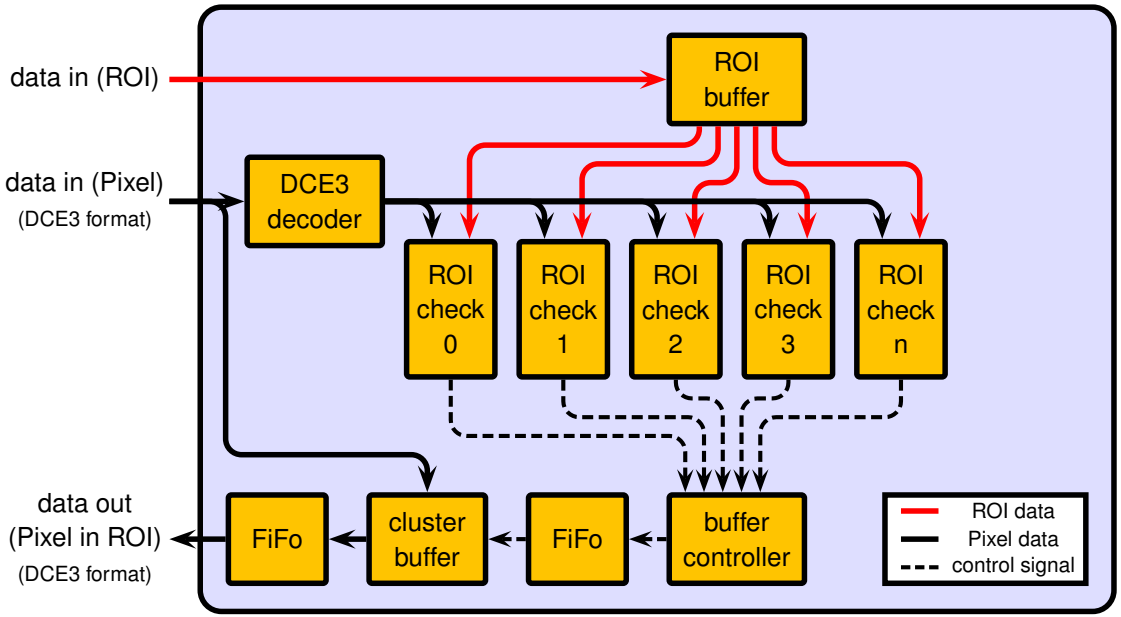
David Münchow

for the Gießen Group

Belle 2 Telescope "Gemba" Meeting
9. April 2013, DESY, Hamburg

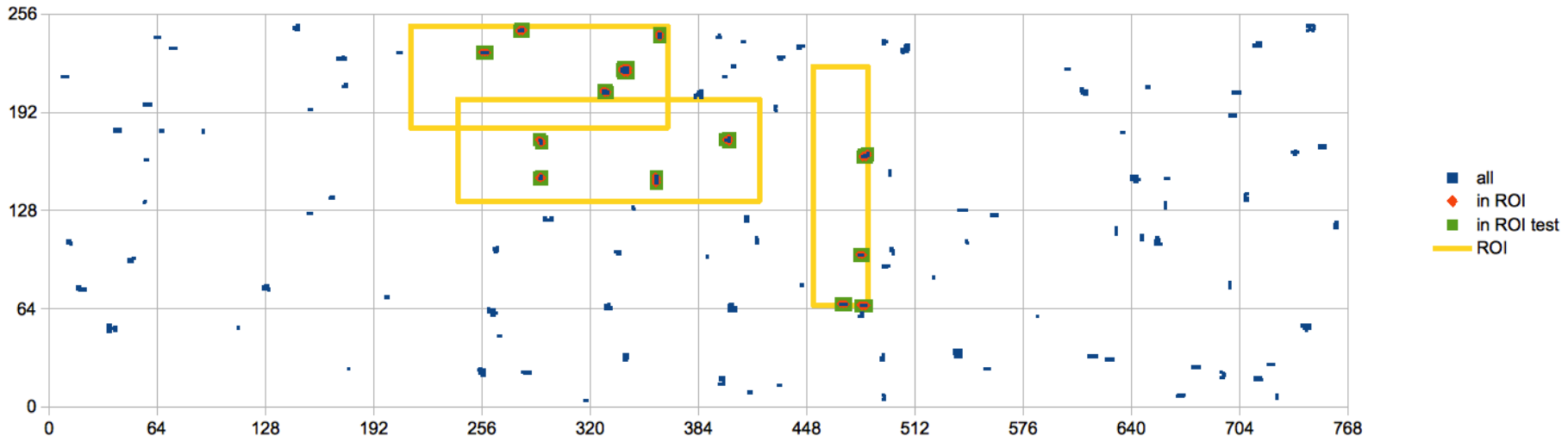
1. Status of ROI Selection Core
2. Status of BonnDAQ for DESY Test

ROI Selection Core



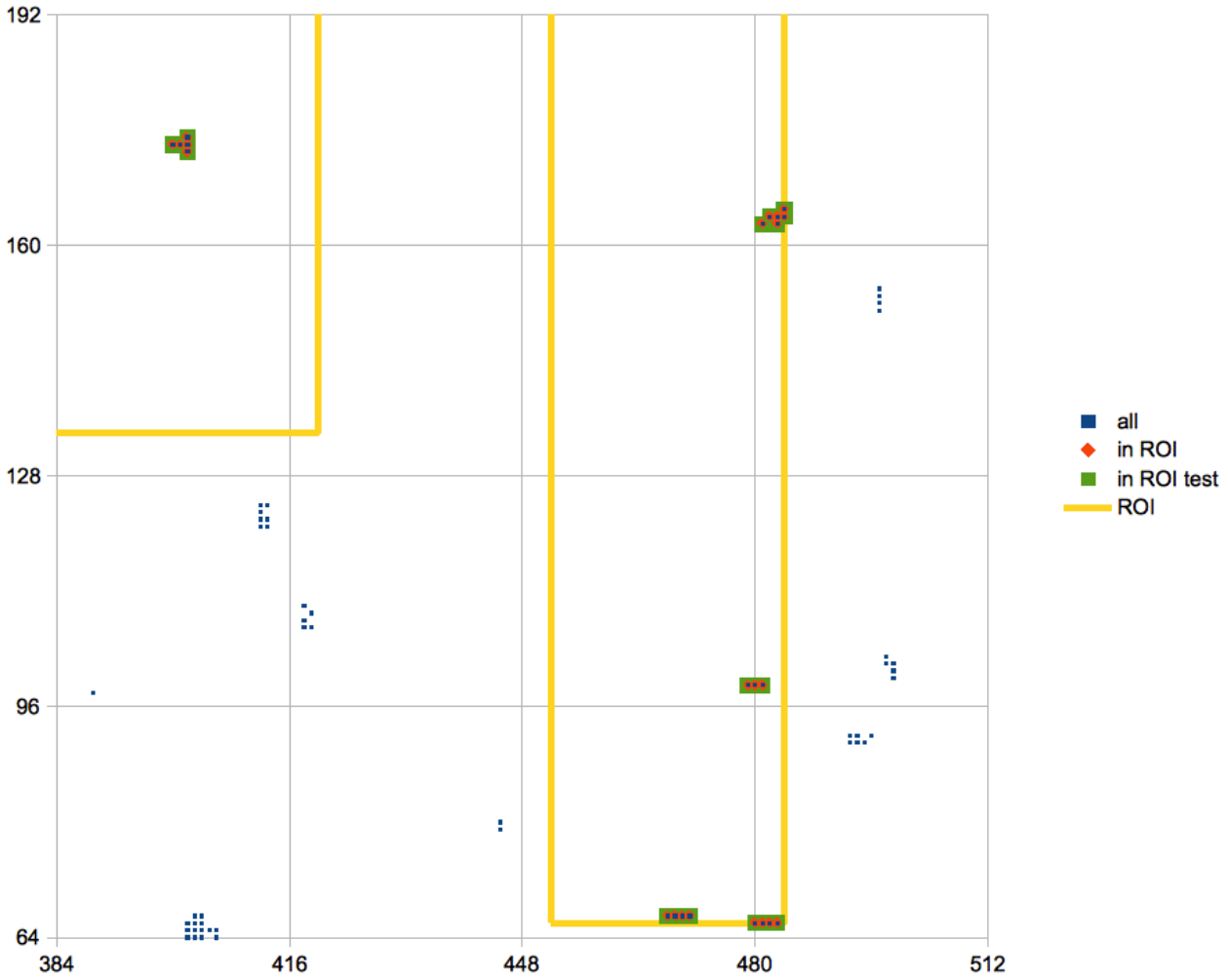
- Simulated with ISim and implemented hardware tested with chipscope
- working:
  - ☺ ROI buffer, ROI check
  - ☺ DCE decoder
- NEW working (first correctly processed event, more tests needed):
  - ☺ Buffer controller
  - ☺ Fifo for control signals, Cluster buffer

Correctly processed Event

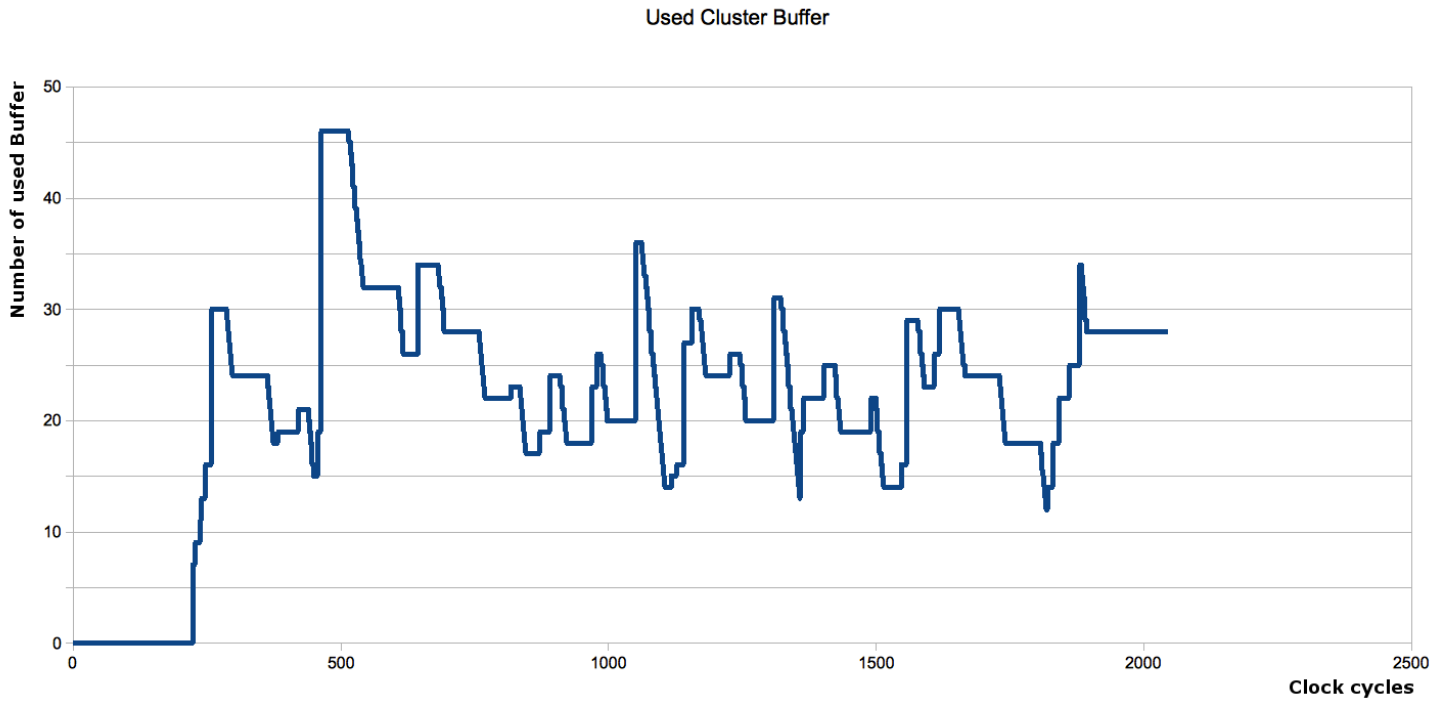


- First correctly processed Event
- Further tests required

Correctly processed Event



Cluster Buffer Usage



- Cluster buffer fills up during waiting for output from ROI core
- Cluster buffer drains during break between bursts
- Further checks required

BonnDAQ for DESY Test

Development in progress

- For development: Local random data input needed
  - Generation of data and sending to BonnDAQ is Possible
  - Accepting of received data and writing to file not working yet
    Problems with recognizing of Trigger ID
- DHH data decoder has to be integrated
- Data visualisation has to be integrated

Summary

- First correctly processed event in ROI Core (more tests needed)
- Development of visualisation of DHH data in BonnDAQ started