# INTRODUCTION AND STATUS OF THE EUDET TELESCOPE



Botanischer Garten - Flottbeck

Ingrid- Maria Gregor DESY

EUDET Annual Meeting 2010 September 29th 2010 Hamburg

#### OVERVIEW JRA1

- JRA1 -> no milestones and deliverables for 2010 (except final report)
- Almost continuous user business since spring 2010 (14 user groups)
- Telescope currently at CERN
- Move back to Hamburg end of November (after DEPFET)

EUDET-Memo-2010-04



#### EUDET Pixel Telescope Data Taking Manual - Updated Version for M26

EUDET JRA1 Group

July 28, 2010

#### Abstract

This manual is intended to help users to take data using the EUDET pixel telescope. You will find detailed explanation on how to power up the telescope, how to start the run control and pictures of important items. This newer version is for the final telescope using the Mimosa26 (system of 2010).





## **USERS 2010**

Dates	Beam line	User group	responsible
10.0515.05.	DESY	APIX(PPS)	Jens Weingarten
17.0520.05.	DESY	Timepix	Jan Timmermans
07.0614.06	CERN	RD42/SPIDER	Jens Weingarten
14.0621.06	CERN	ATLAS -3DSi	Philippe Grenier
21.0605.07	CERN	NA62	Tonino Sergi
05.0726.07	CERN	APIX (PPS)	Jens Weingarten
09.08-23.08	CERN	APIX-Diam.	Jens Weingarten
23.0820.09	CERN	ALFA	Karlheinz Hiller
20.0927.09	CERN	SPIDER	Jaap Velthuis
27.0911.10	CERN	SiLC/EUDET	Thomas Bergauer
11.1025.10	CERN	APIX (PPS)	Jens Weingarten
25.1008.11	CERN	APIX (IBL)	A.LaR, PG, JW
08.1115.11	CERN	SILCRD	David Cussans
15.1121.11	CERN	DEPFET	Julia Furletova

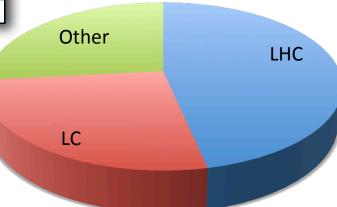
Telescope will be moved back to DESY end of November

First bookings for Februar, March and April 2010

When preparing the schedule we always try to find time for every group independent of the community.

Requests from LHC community rising.







## LAST CHANGES (2010)

- upgrade of mechanics in spring was well received by users
  - transport and setup much easier
  - danger to "kill" wire bonds reduced
  - possibility to replace sensor (so far not needed)
  - pluggable cooling
  - alignment marks etc.
- replaced cables improved strain relief
- found some "features" in DAQ -> Emlyn

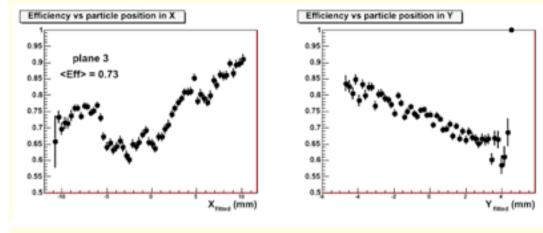


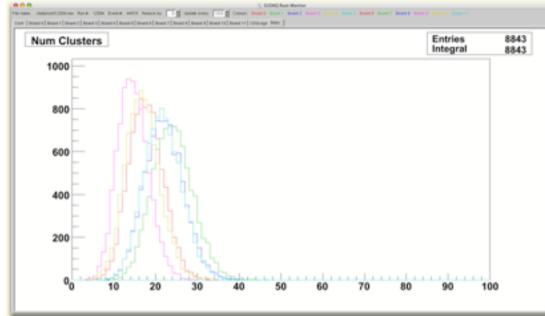
- Since weeks the telescope is running without any hick-ups, crashes or other tantrums -> Queen EUDET seems to be grown up now
  - 750Hz during spill (using to VME crates)
  - all 6 planes (no failures in EUDRBs)



#### ONE SMALL PROBLEM

- One of the sensors (plane 3 sensor XX) seems to be different now -> when setting the threshold to the same value as the others (using Strasbourg settings) it behaves like having a higher threshold
- fake hit rate, efficiency and resolution drop out
- for most of the time during the season we programmed it to S/ N = 7.5 (instead of 8)
- reason for this is currently unknown
- sensor will be send to Marie at the end of the season







## SCOPE OF MEETING

