# Planning 2009

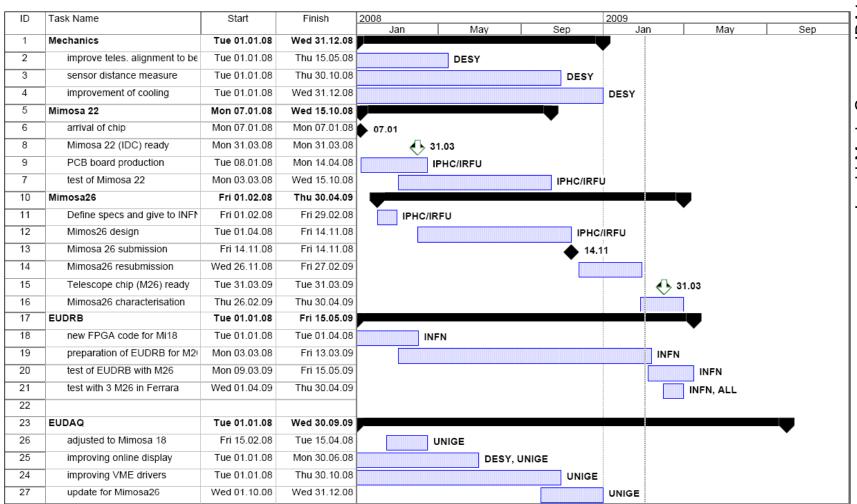


#### Ingrid-Maria Gregor DESY

JRA1 Meeting, Strasbourg March 4<sup>th</sup> 2009



### Planning 2009



Ingrid-Maria Gregor, JRA1: Planning 2009

## Planning 2009

| ID | Task Name                       | Start        | Finish       | 2008 2009 |         |     |              |     |     |     |
|----|---------------------------------|--------------|--------------|-----------|---------|-----|--------------|-----|-----|-----|
|    |                                 |              |              | Jan       | May     | Sep |              | Jan | May | Sep |
| 28 | final readout ready (Milest.)   | Wed 31.12.08 | Wed 31.12.08 |           |         |     | 45           |     |     |     |
| 29 | adjust to latest issues         | Mon 09.03.09 | Wed 30.09.09 |           |         |     |              |     |     |     |
| 30 | EUTelescope                     | Tue 01.01.08 | Wed 30.09.09 |           |         |     |              |     |     |     |
| 31 | implement Milipede II           | Tue 01.01.08 | Mon 30.06.08 |           | INFN, D | ESY |              |     |     |     |
| 32 | improve user interface          | Tue 01.01.08 | Mon 30.06.08 |           | INFN    |     |              |     |     |     |
| 33 | tracking software available     | Wed 31.12.08 | Wed 31.12.08 |           |         |     | Ŷ            |     |     |     |
| 34 | work on user support etc.       | Mon 09.03.09 | Wed 30.09.09 | 1         |         |     |              |     |     |     |
| 35 | Final Telescope                 | Wed 01.04.09 | Wed 30.09.09 | 1         |         |     |              | 7   |     |     |
| 36 | integration of M26 and EUDRI    | Wed 01.04.09 | Thu 30.04.09 |           |         |     |              |     | ALL | •   |
| 37 | integrating 3 sensors in teles. | Mon 01.06.09 | Tue 30.06.09 |           |         |     |              |     |     |     |
| 38 | new deadline                    | Wed 30.09.09 | Wed 30.09.09 | -         |         |     |              |     |     | Ŷ   |
| 39 | Testbeams                       | Fri 30.05.08 | Sun 30.08.09 |           |         |     |              |     |     | J   |
| 40 | SILC at SPS/CERN                | Fri 30.05.08 | Fri 06.06.08 |           | ň       |     |              |     |     | •   |
| 41 | EUDET with DEPFET at PS         | Wed 16.07.08 | Wed 30.07.08 |           |         |     |              |     |     |     |
| 42 | EUDET at H6/CERN                | Wed 06.08.08 | Wed 20.08.08 | -         |         |     |              |     |     |     |
| 43 | DEPFET at H6/CERN               | Wed 20.08.08 | Wed 27.08.08 | -         |         |     |              |     |     |     |
| 44 | ISIS at H6/CERN                 | Wed 27.08.08 | Wed 03.09.08 |           | , i i   |     |              |     |     |     |
| 45 | EUDET at DESY testbeam          | Mon 22.09.08 | Wed 31.12.08 | -         |         |     |              |     |     |     |
| 46 | CMS Diamond DESY ??             | Thu 14.05.09 | Thu 28.05.09 | -         |         |     |              |     |     |     |
| 47 | EUDET at CERN testbeam          | Mon 13.07.09 | Fri 31.07.09 |           |         |     |              |     |     |     |
| 48 | DEPFET at H6/CERN               | Fri 31.07.09 | Thu 06.08.09 |           |         |     |              |     |     |     |
| 49 | LCFI                            | Fri 07.08.09 | Thu 13.08.09 | 1         |         |     |              |     | n n |     |
| 50 | DigiPILC                        | Thu 13.08.09 | Tue 18.08.09 |           |         |     |              |     | П   |     |
| 51 | SILC                            | Wed 19.08.09 | Sun 30.08.09 |           |         |     |              |     | Ĩ   |     |
| 52 | Documentation                   | Wed 31.12.08 | Wed 31.12.08 |           |         |     | <b>d</b> 31. | 12  | L   | _   |
| 53 | Test report analog telescope    | Wed 31.12.08 | Wed 31.12.08 | 1         |         |     | 31.          | 12  |     |     |

### **Detailed Planning (to be discussed)**

#### Mimosa26

- testing: first characterisation until end of April
- □ Available for EUDET: one chip right away, three April 6<sup>th</sup>
- JRA1 Milestone: ",chip available" end of March can be fulfilled

#### EUDRB/DAQ

- Start tests with chip asap
- □ Test with 3 sensors in April (Ferrara) -> Geneva group will go there

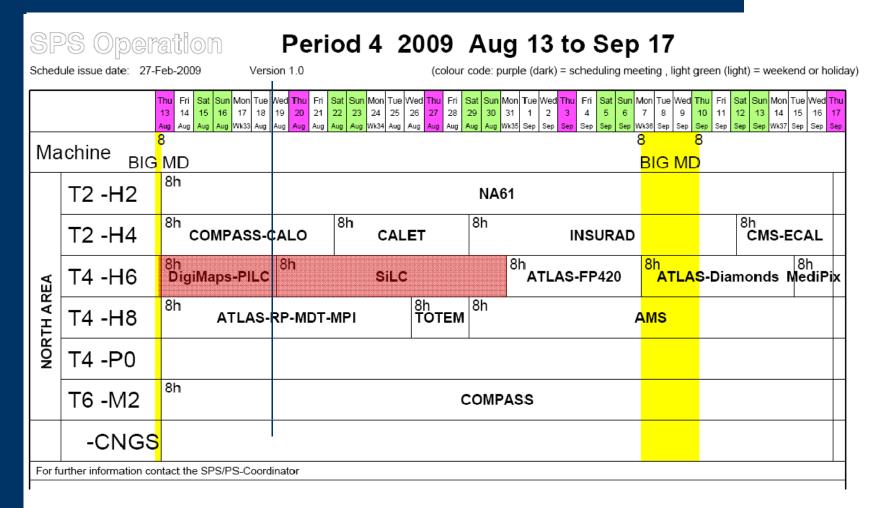
#### Towards Full Telescope

- Move Demonstrator to CERN around June
- Get it ready for data taking
- Put 3 Mimosa26 in MaserBoxTelescope and put into DUT slot
- Run 3 Mimosa26 and eventully together with 3 MimoTel/Mimosa18
- □ Have Demonstrator ready for users mid July
- Upgrade to full Mimosa26 system after user business (at DESY??)

## **SPS Schedule**

|            | S Operative ule issue date: 27-F |                          | Version 1.                 |         | od 3 2009<br>(colour |  | <b>Aug 13</b><br>= scheduling meeting , light  | green (light) = we  | ekend or holida  |
|------------|----------------------------------|--------------------------|----------------------------|---------|----------------------|--|--|---------------------|--|
|            | ٢                                |                          |                            | 6 17 18 |                      | Sat      Sun      Mon      Tue      Wed      T        25      26      27      28      29        Jul      Jul      Wk30      Jul      Jul | Thu      Fri      Sat      Sun      Mon      Tue      Wed        30      31      1      2      3      4      5        Jui      Jui      Aug      Aug      Wk31      Aug      Aug | 6 7 8 9             | Mon Tue Wed <mark>Thu</mark><br>10 11 12 <mark>13</mark><br>Vk32 Aug Aug Aug |
| Ma         | chine                            | 8                        | 8 8<br><mark>BIG MD</mark> |         |                      |  |  |                     | 8 8<br><mark>BIG MD</mark>   |
|            | T2 -H2                           | <sup>8h</sup> CN         | IS-HCAL                    |         | 8h                   |  | NA61   |                     |  |
|            | T2 -H4                           | <sup>8h</sup> CMS-EC     | AL 8h                      |         | DREAM                |  | <sup>8h</sup> CALICE-RPC   | COMPAS              | SS-CALO  |
| NORTH AREA | T4 -H6                           | 8h<br>ATLAS-I            | MMEGAS                     | 8h      | EUDE                 | Г  | 8h<br>DEPFET   | 8h<br>LCI           | -1   |
|            | T4 -H8                           | 8h                       | ATLAS-S                    | FRAW    | 8h<br>TOTEM          | 8h   | UA9  | <sup>8h</sup> ATLAS | -RP  |
| NOR.       | T4 -P0                           | 8h<br>A Cecq <b>be</b> g | <mark>462</mark>           |         |                      |  |  |                     |  |
|            | T6 -M2                           | 8h                       |                            | COMPASS |                      |  |  |                     |  |
|            | -CNGS                            |                          |                            |         |                      |  |  |                     |  |
| For fu     | Irther information cor           | ntact the SPS/PS         | S-Coordinator              |         |                      |  |  |                     |  |

## **SPS Schedule**



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## **EUDET JRA1 Testbeam 2009**

#### DESY

□ 15. – 30 May: CMS Diamond (????)

#### **CERN H6B**

- □ July 17<sup>th</sup> EUDET (2 weeks)
- □ July 31<sup>st</sup> DEPFET (1 week)
- **August**  $6^{th}$  ISIS (1 week)
- □ August 13<sup>th</sup> PILC (6 days)
- □ August 20<sup>th</sup> SILC (11 days)
- Parasitic running: Ivan Peric (EUDET term)
- DEPFET also parallel with EUDET
- □ ISIS parallel with PILC (???)
- MimoRoma ?? To de defined

### **F** ~ 7 weeks

#### Further discussion with:

- ATLAS straw tubes (so far through Julia)
- ATLAS planar pixel (Jens Wüstenfeld)
- 3D sensors (HG Moser)

• ....

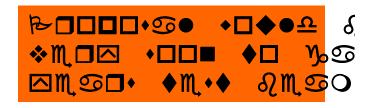
#### DESY

- September: commissioning of final telescope !!! (really at DESY??)
- October: ATLAS Planar Pixel (???)

## **Two Telescopes ?**

- Planned: "upgrade" demonstrator to final telescope
  - □ Replace MimoTel by Mimosa26
  - □ Change EUDRBs to digital readout
- More and more requests for the telescope (always for use at CERN-SPS)
- Full Copy of Telescope costs ~100kEUR (without men power)
- Possible solution: we propose a telescope to CERN:
  - CERN pays the material and we do some of the work
  - CERN stuff joins JRA1 to help us keeping it running until 2010 while learning how to keep their copy running
  - □ Something like this ...

| Item               | Full Copy<br>[kEUR] |
|--------------------|---------------------|
| Chips (Mimosa26)   | 20                  |
| Sensor Boards      | 5                   |
| Readout Boards     | 20                  |
| Mechanics (simple) | 10                  |
| VME CPU            | 3                   |
| VME crate 64bit    | 5                   |
| XY table           | 15                  |
| Cooling            | 5                   |
| Power Supplies     | 5                   |
| TOTAL              | 88                  |



### **Publication Of Analog Telescope Results**

- Testbeam data should be published as soon as possible
- NIM-A seems to be the right journal (as discussed May  $2008)_{2}$ 150 Mosem

#### What to do

- Decide on outline of paper (done much earlier)
- Draft paper (main editing: IMG -> draft very preliminary)
- Paper meeting tomorrow to decide who works on what (11:15-13:00?)

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- Input to next version: April 15<sup>th</sup> 2009
- □ Prepare draft 1 and circulate (JRA1) -> April 17<sup>th</sup> 2009
- Paper ready to be submitted to EUDET SC -> April 30<sup>th</sup> 2009
- Submit as report to EUDET ~May 15<sup>th</sup> 2009
- Submit to NIM-A shortly after

### **Conferences 2009**

#### □ TIPP2009 March 11–17 2009, Tsukuba, Japan

- □ Antonio Bulgheroni, The EUDET Telescope ...
- □ Christine Huguo, Mimosa26
- □ Ingrid-Maria Gregor, EUDET Overview Talk
- IEEE NPSS Real Time Conference 2009, May 10-15, 2009, Beijing, China
  Daniel Haas, The DAQ for the EUDET Telescope
- □ 11th Pisa Meeting on Advanced Detectors, May 24 30, 2009, La Biodola, Isola d'Elba (Italy)
- 11th European Symposium on Semiconductor Detectors, June 7th 11th, 2009 at Wildbad Kreuth, Germany
- **....**
- Please send a mail to Natalia Potylitsina-Kube if you give a EUDET related talk at any conference !! This makes life much easier when we write the annual report.