

LBL Pixel-TPC Plans

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LBL

LC-TPC Mini-Workshop
13 & 15 Jan. 2005

Outline

- NIKHEF/Saclay 2D Micromegas Pixel Readout
- LBL ATLAS Pixel Detector Laboratory
 - 3D Pixel Readout (w/ time stamping)
 - DAQ System
- LBL TPC R&D Laboratory
 - DAQ System

- Gas amplification using a **Micromegas** mesh

Gas
HV
gain

...

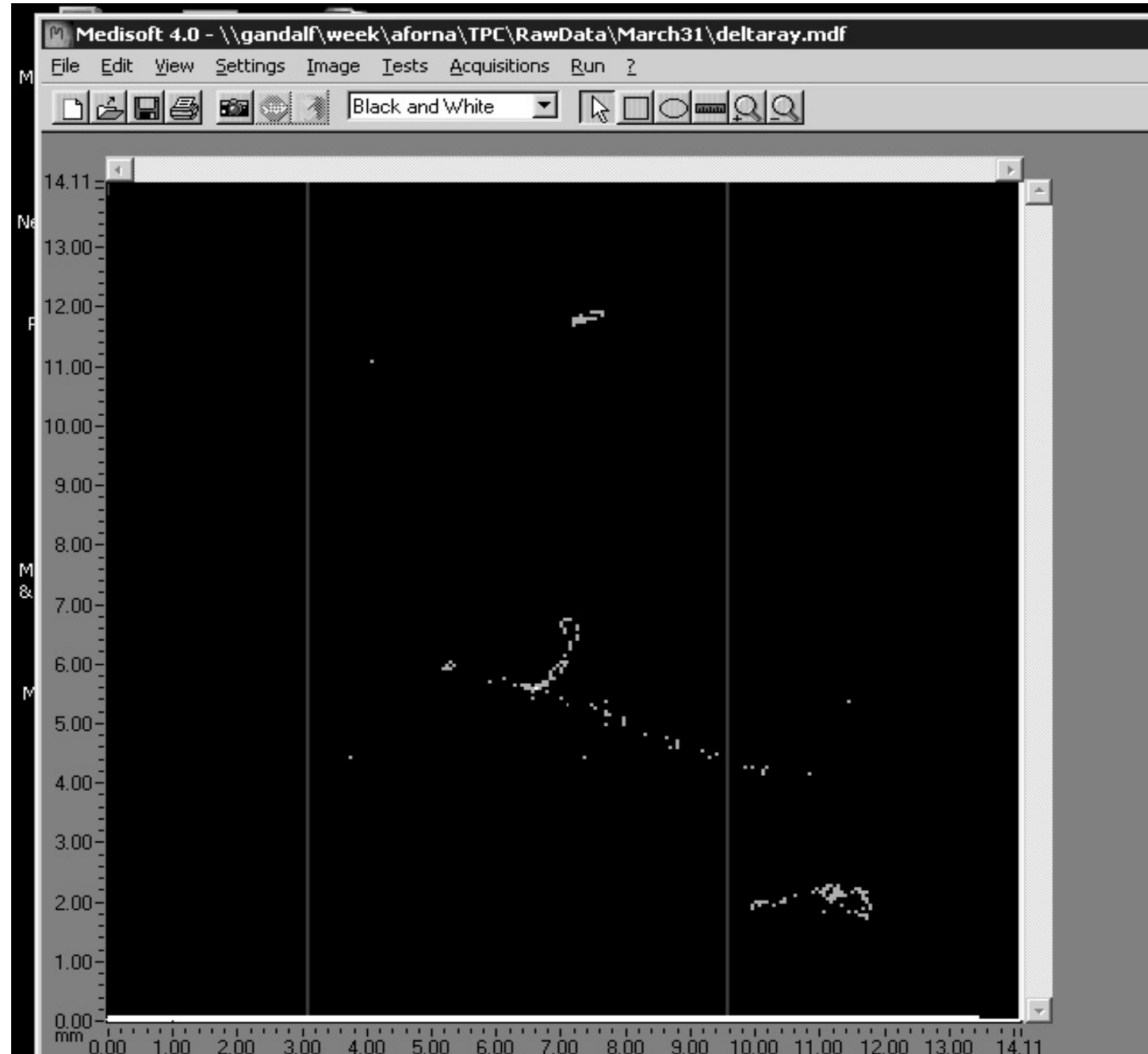
- Readout chip **MediPix** chip

pixels 50 X 50 μm

...

- DAQ system **Medisoft 4.0**

...



LBL ATLAS Pixel Detector Laboratory

1/12/05

Pixel sensor and R/O chip



Temperature controlled brass radiation enclosure box.

Module adapter card



Turbo DAQ System



VME Modules:

Turbo PLL

...

DAQ Software

National Instruments

LabWindows/CVI (ANSI C)

IMAQ 2.5.1

LBL TPC R&D Laboratory



But the wrong type of gas.



Dell Linux box and monitor.
(I may need to borrow a scope.)

3D Pixel TPC DAQ

Need a Turbo DAQ system
or something simpler.

Module adapter
card



Turbo Java DAQ System



- Gas amplification
using a **Micromegas** mesh
Gas
HV
gain
...
- Readout chip
ATLAS pixel R/O
pixels 50 X 200 μm
...
- DAQ system
NI Measurement Studio
LabWindows/CVI
...

When

LCWS ???

Snowmass ??

2005 ?