

Welcome !

1st MPGD workshop, January 20th 2006

<http://indico.cern.ch/conferenceDisplay.py?confId=473>

“MPGD; towards and R&D collaboration”
September 10-11 2007

<http://indico.cern.ch/conferenceDisplay.py?confId=16213>

~100 persons registered

>35 talks

MPGD success story

- High rate capability
- Excellent time resolution
- Flexible readout geometry => possibility for excellent position resolution
- High radiation resistance
- ...etc.....

**Very wide interest from particle physics
community and beyond**

.... towards an R&D collaboration

Efforts on MPGD are spread widely over the many particle physics labs.

What gain to get from a **technology-oriented** collaboration?

Looking for synergy in various activities

- Optimise communication and sharing of knowledge/experience/results,
- Share infrastructure (e.g test beam infrastructure, readout, gas infrastructure.....),
- Bundle electronics developments,
- Combine widespread simulation efforts towards setting-up a common maintainable software package for gas detector simulations
- Agree on common test and quality standards
- Share investment of common projects (e.g. larger mask sets for GEMs, electronics submissions/production)

...personal observation

- So far large efforts in MPGD detector technology
- Successful application in a wide range of experiments
- Great potential for future applications

- Some difficulty to fund technology developments (e.g. larger areas, industrialisation)
- Need for more systematic studies (e.g. aging, radiation hardness, ion feedback..)
- Factorised efforts in detector simulation
- Room for collaboration in electronics developments

..about opportunities

CERN council June 2007, additional funds for detector development

- CERN PH-department is ready to invest part of these funds in MPGD, provided that it receives the support of a structured effort
- Possibility to apply for EU funding? => will need a collaborative effort
(upcoming Integrated Activity calls)

suggestions for discussion session

Discussion/working groups on:

- Technology aspects
- Stability studies
- Software tools
- Electronics developments

Clarify:

Technology-oriented collaboration ⇔

Application-oriented collaboration

Possible application for EC funded IA:

- Common test beam for MPGD
- Common software tools
- Common electronics/read-out tools for development work

Have a nice workshop!