WG-6 summary

WG6: TE/MPE/EM Workshop upgrade

Last year, agreement was reached with CERN management to purchase the subset of machines necessary to carry out R&D on large size GEM (2m x 0.5 m) & Micromegas (2m x 1m) and the associated large size read-out boards in the current CERN TE/MPE/ME facility.

GEM	market	call for	order	received	ready
	survey	tender			
 1 continuous polyimide etcher 	x	X	X	X	06/2011
 1 Cu electroetch line 	X	X	X		06/2011
Micromegas					
 1 large laminator 	x	X	X		06/2011
 1 large Cu etcher 	x				09/2011
 1 large UV exposure unit 	x	X	X	X	06/2011
 1 large resist developer 	x				09/2011
 1 large resist stripper 	X				09/2011
1 large oven	x	X	X	X	06/2011
1 large dryer	X	X	x	X	06/2011
	 1 continuous polyimide etcher 1 Cu electroetch line Micromegas 1 large laminator 1 large Cu etcher 1 large UV exposure unit 1 large resist developer 1 large resist stripper 1 large oven 	Survey - 1 continuous polyimide etcher x - 1 Cu electroetch line x Micromegas - 1 large laminator x - 1 large Cu etcher x - 1 large UV exposure unit x - 1 large resist developer x - 1 large resist stripper x - 1 large oven x	survey tender - 1 continuous polyimide etcher x x - 1 Cu electroetch line x x Micromegas - 1 large laminator x x - 1 large Cu etcher x x - 1 large UV exposure unit x x x - 1 large resist developer x - 1 large resist stripper x - 1 large oven x x	survey tender - 1 continuous polyimide etcher	survey tender - 1 continuous polyimide etcher

CERN investment:

- Equipments for large size GEM manufacturing (2m x 0.5m goal)
- Equipments for large size Micromegas manufacturing (2m x 1m goal)
- Participation of 4 technicians (15% of their time)
- Participation from AIDA:
 - Finance a technician during 2 years to:
 - Set up the equipments
 - Produce some large prototypes for: (non exhaustive list)

Transfer to industry

• Micromegas:

- •Cirea → handled by Saclay → one std Bulk produced successfully
- •Eltos? Do we start something?
- •US → handled by V.Polychronakos/BNL → large PCB produced and BULK?
- Other companies?
- Resistive coatings?

•GEMs:

- •New-Flex → Handled by CERN/ Corea . 100 x 100 GEM are being produced
- Micrometal → problem of width → stop?
- India → few information. Waiting for their visit at CERN
- Techetch/USA
- Scienergy/Japan