Subject: Absolute gain Measurement L1C1#2
Posted by Sascha Freuen on Mon, 10 Jan 2005 13:23:55 GMT
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Dear All

Please find below the results of our absolute gain measurement.
The measurement was achieved by recording the anode current and the individual pulses.
For measuring we used the Fe source with 3 different collimators.
This is to avoid space charge effects and to check for consistency.
Collimator 3 allows the most intensity , collimator 1 least intensity.

edit:
drift voltage : -2100 V
gas mixture : Ar(85%)/CO2(15%)

Subject: Re: Absolute gain Measurement L1C1#2
Posted by Clemens Adler on Wed, 12 Jan 2005 08:58:23 GMT
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Hi Sascha,
I have one question to your measurement, since the gain is only 2/3 of what is reported in Anton et al.'s 'Drift velocity and Gain...'-paper. Was the drift voltage on for your measurements?

cheers,
Clemens

Subject: Re: Absolute gain Measurement L1C1#2
Posted by Sascha Freuen on Wed, 12 Jan 2005 10:45:07 GMT
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Hi Clemens

The drift voltage was -2100 V.

btw. oxygen content was 80 ppm ,which maybe reduce the abs. gain too, due to electron attachment ?

cheers
Sascha

Subject: Re: Absolute gain Measurement L1C1#2

Posted by Clemens Adler on Wed, 12 Jan 2005 11:12:37 GMT
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Hi Sascha,
Christian just reminded me that the chambers in the paper have a different geometry (6.4mm amplification region instead of 7.2mm for the big chambers). This easily explains the difference.

cheers
Clemens