

MWPC Design for the CPP Experiment

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Chamber geometry

$V=0$

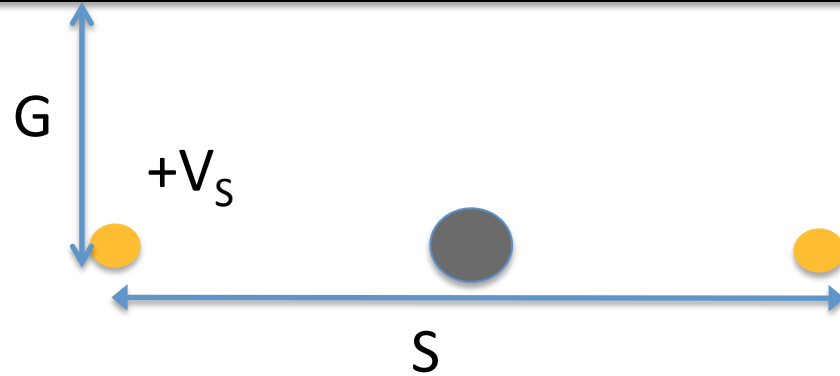
20 μm Au plated
W sense wire



V_F



50 μm Be-Cu
field wire



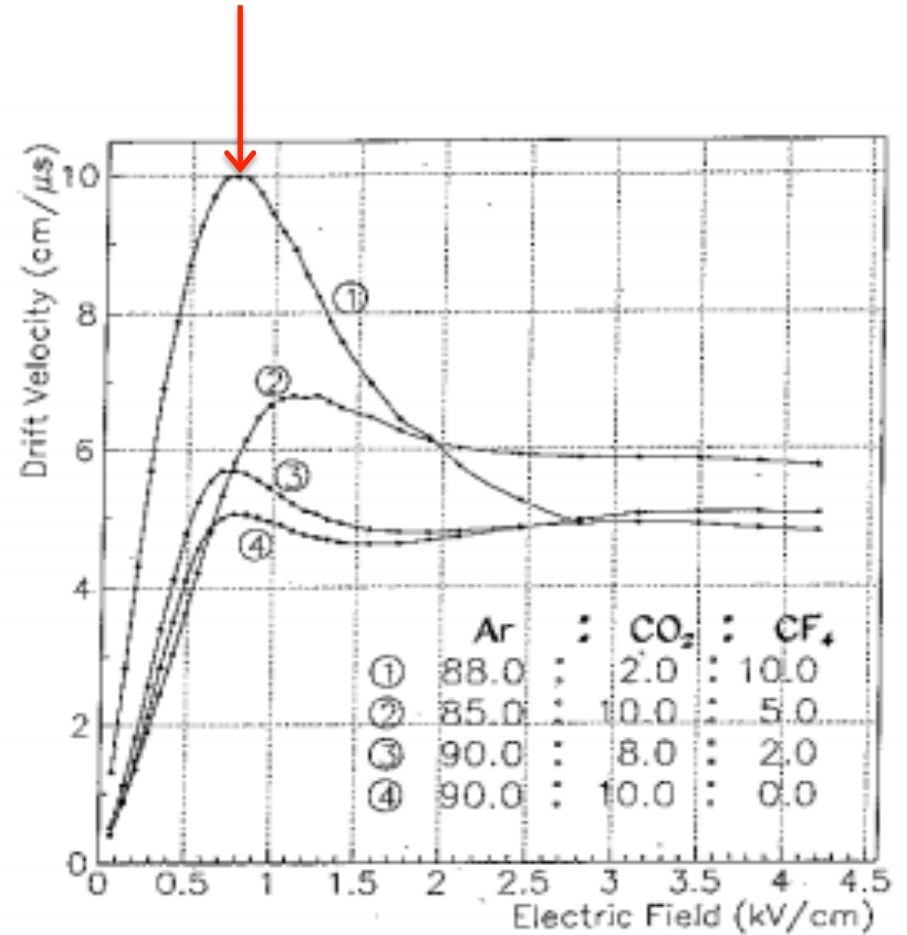
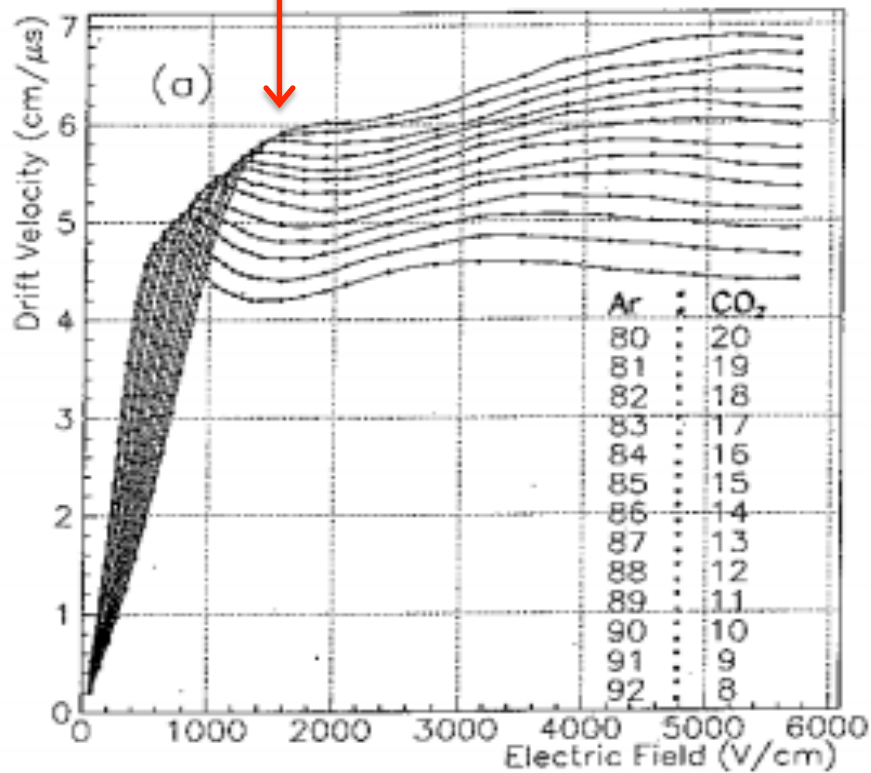
$V=0$

Cathode planes, 1/32" aluminum plates

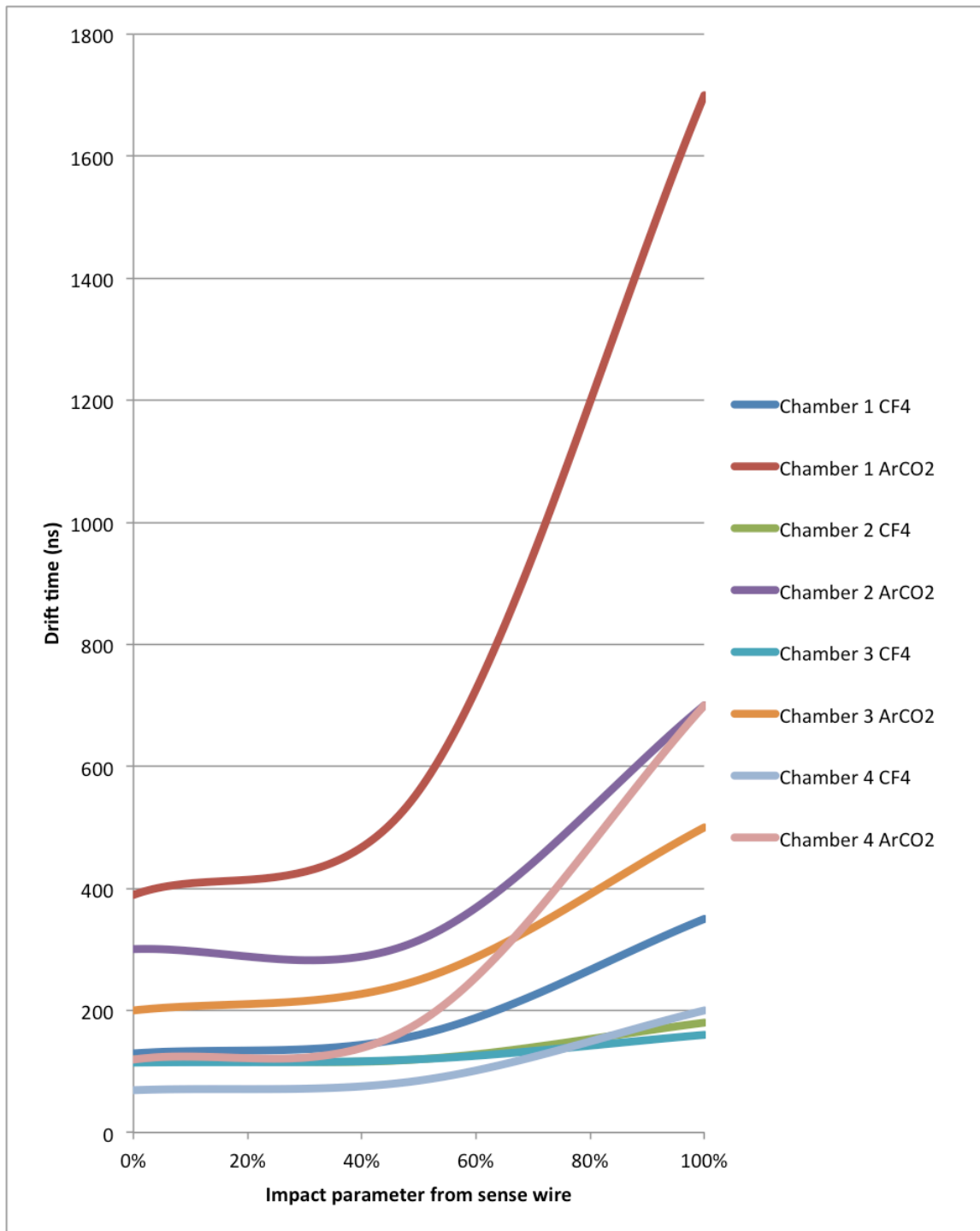
Choice of gas and electric field

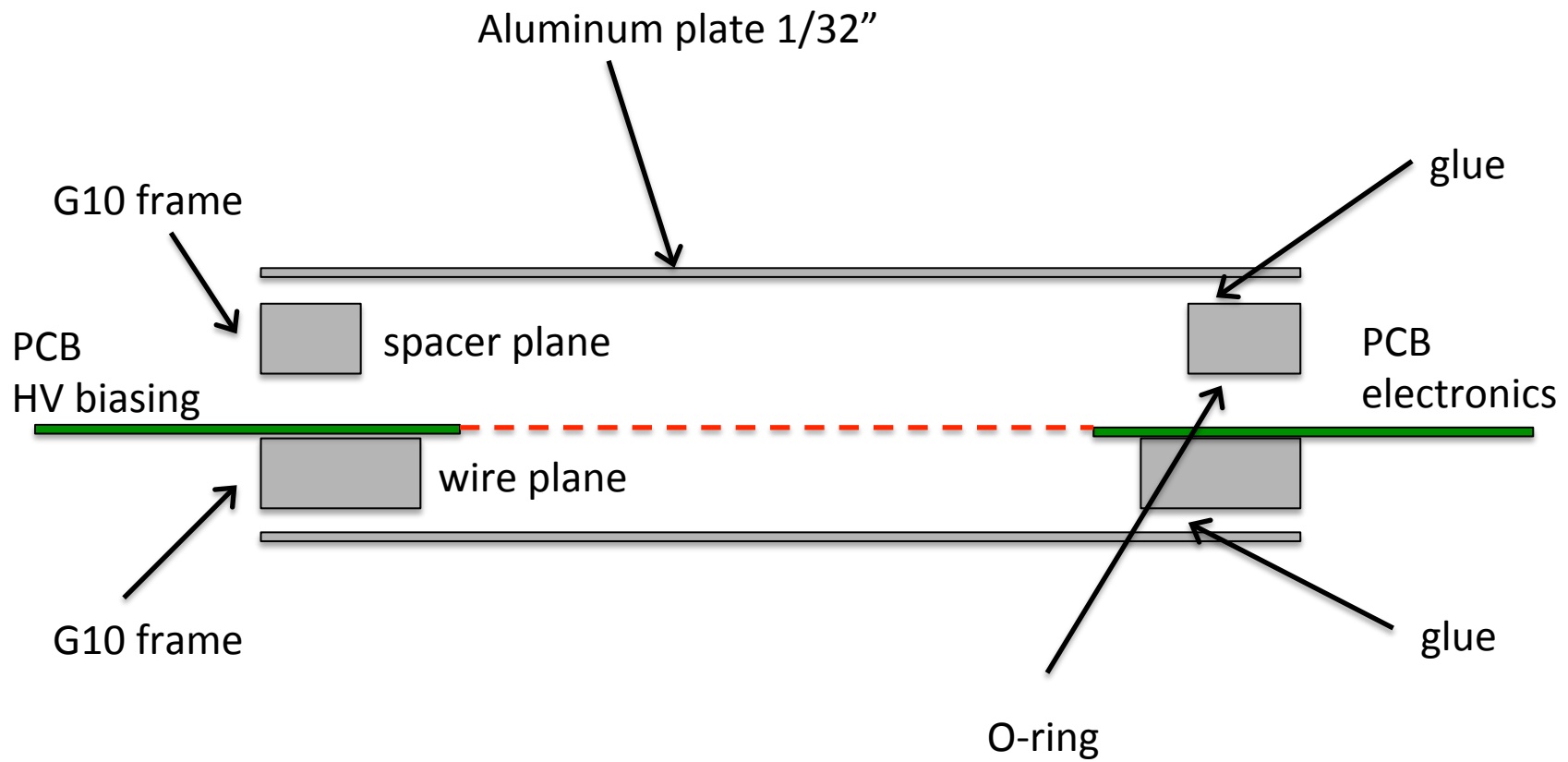
Ar:CO₂ 80:20
6 cm/μs @ 1.5 kV/cm

Ar:CO₂:CF₄ 88:2:10
10 cm/μs @ .75 kV/cm



Chamber geometry	S (cm)	G (cm)	V_S	V_F	V_{plane}
1	2	1	+1830	0	0
2	1	1	+1880	0	0
3	1	1	+2050	+500	0
4	.6	.6	+1700	0	0





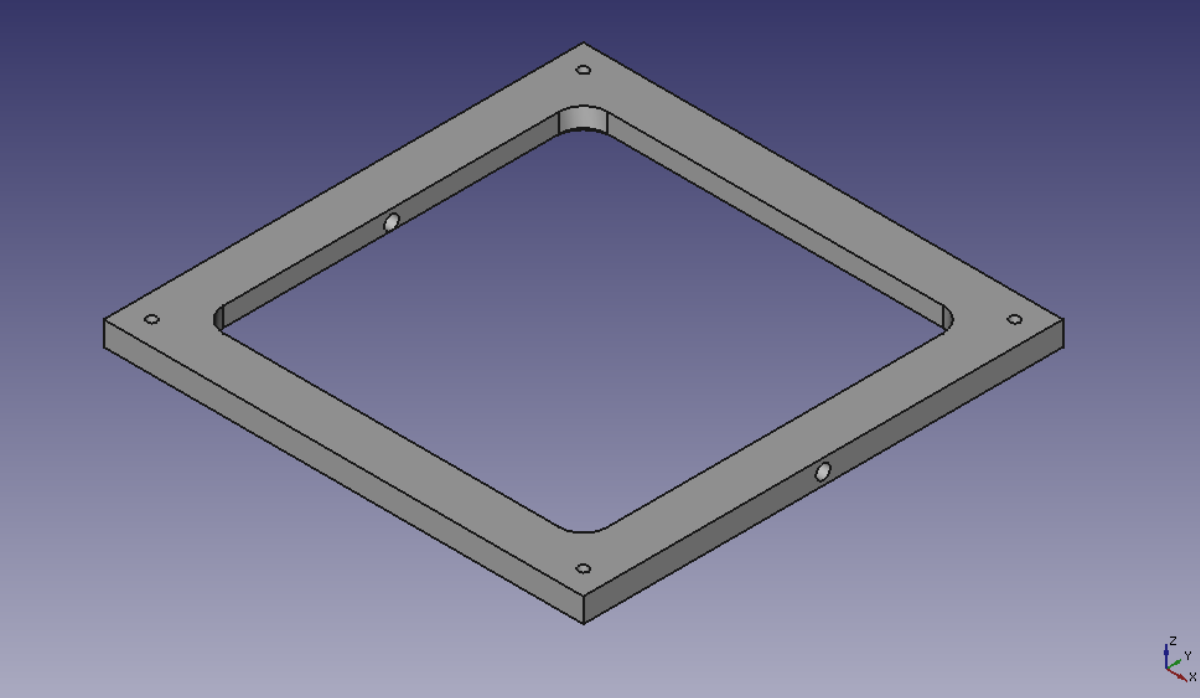


Stratasys

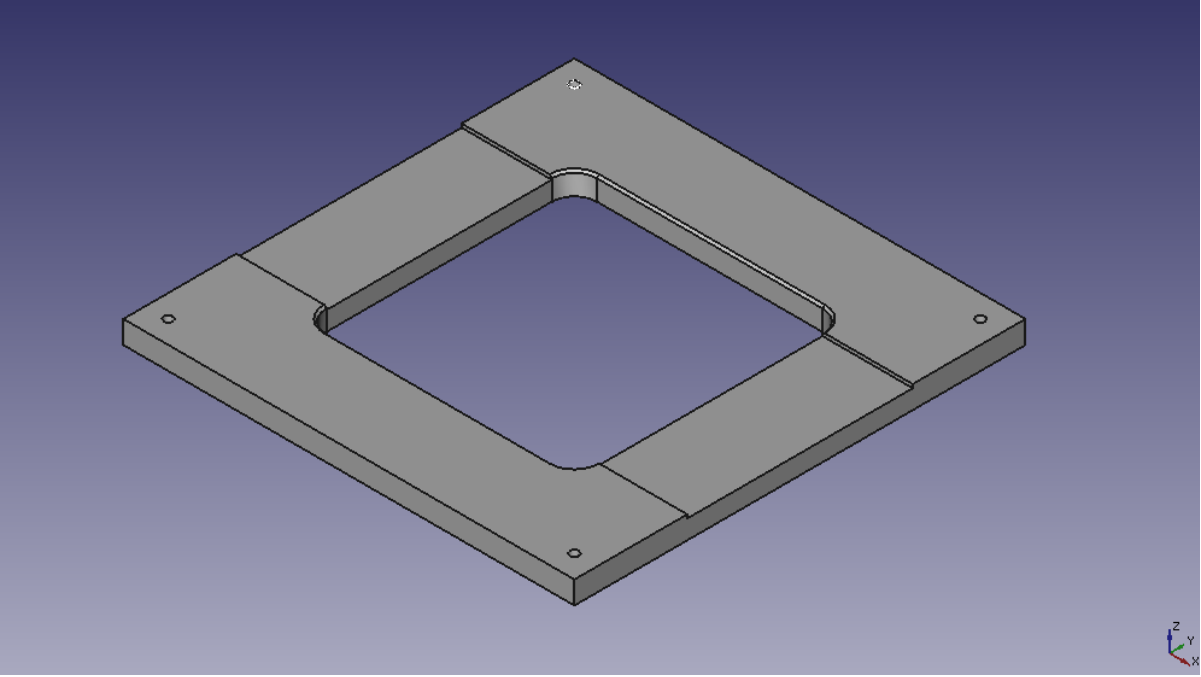
FOR A 3D WORLD™



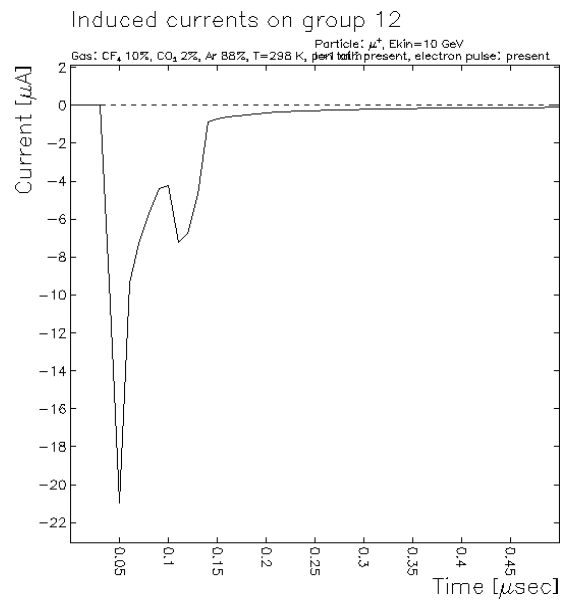
spacer plane



wire plane

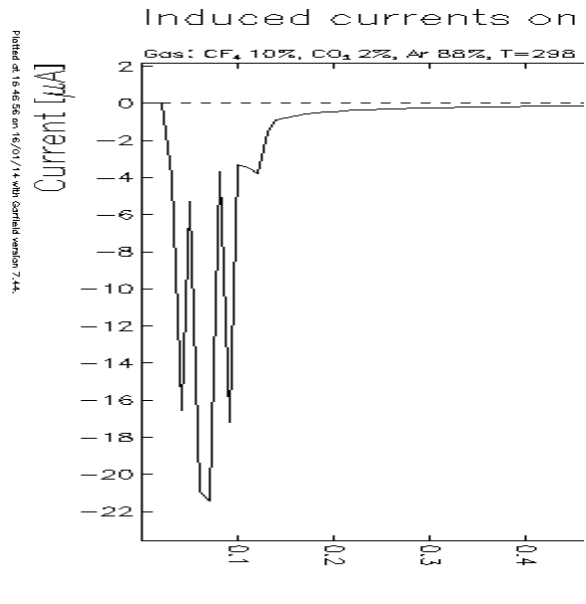


Case 1

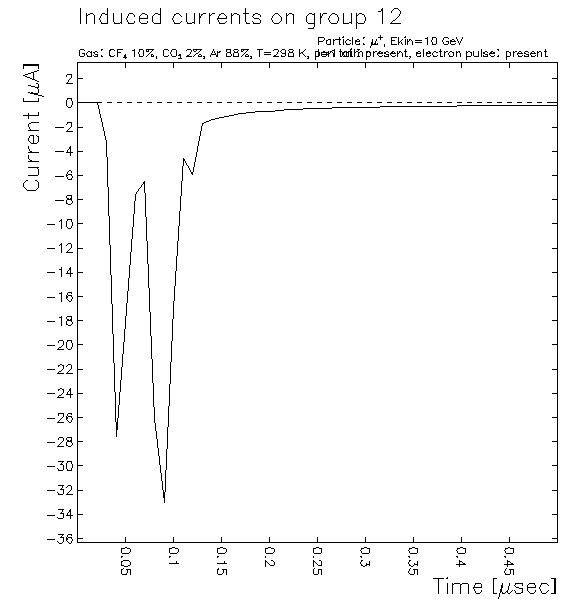


CF4

Case 2



Case 3



CF4

CF4 gas mixtures only

Current to voltage convertor

