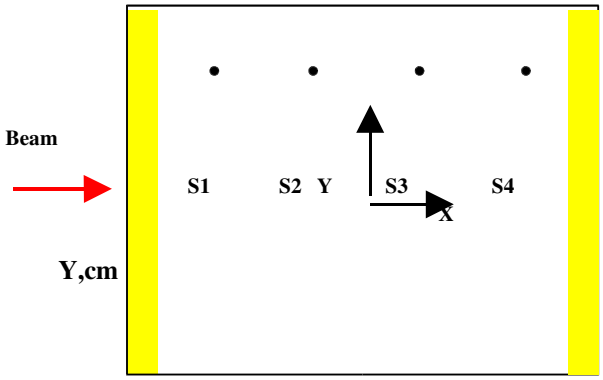
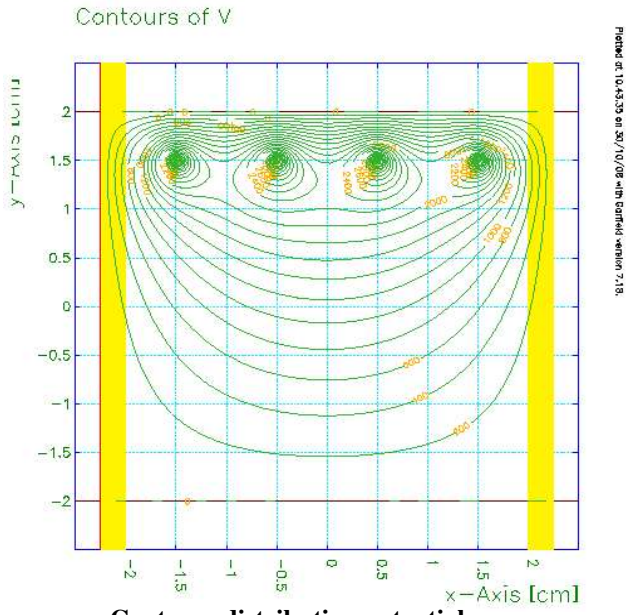
It is first results of software simulation using GAFFIELD program.

Part 1

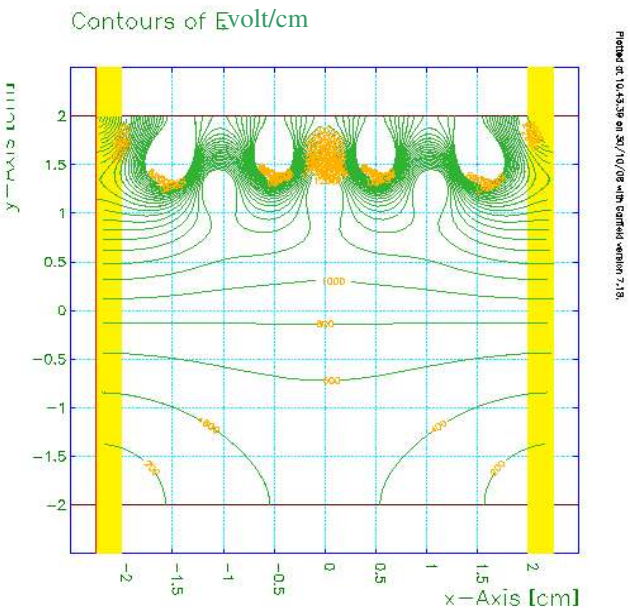
Planes: x = -2.25 cm, x = 2.25 cm, y = -2.0 cm, y = 2.0 cm.
Dielectricum (position (x_begin,x_end)): x(-2.25,-2.0), x(2.0,2.25)
Anodes wires (name wire Sx, position wire (x,y), wire voltage U_{sx}, wire diameter):
S1(-1.5,1.5), S2(-0.5,1.5), S3(0.5,1.5), S4(1.5,1.5)
$U_{s1} = U_{s2} = U_{s3} = U_{s4}$ = 9000 V, diameter = 0.0020 cm



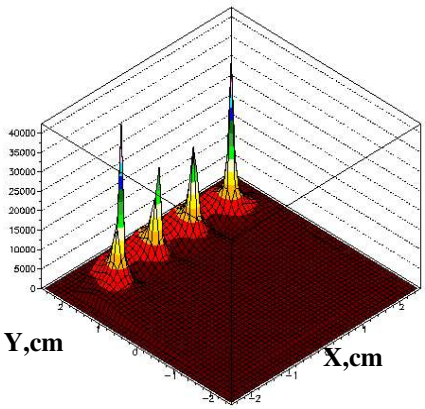
,volt



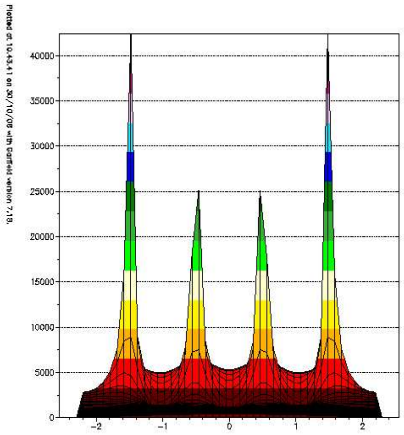
Contours distribution potential



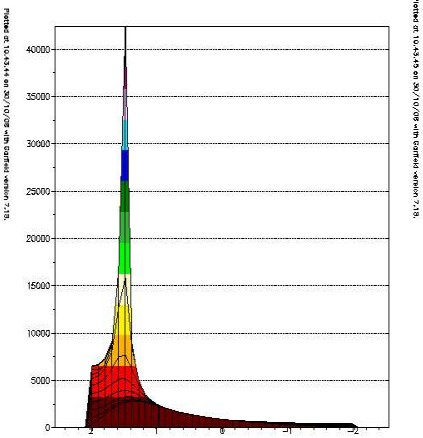
Contours distribution E field



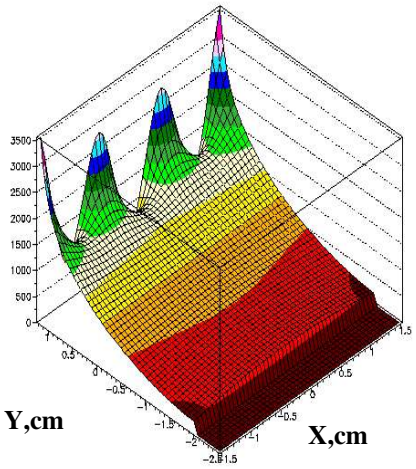
2D distribution E field
by the all area on X and Y axis



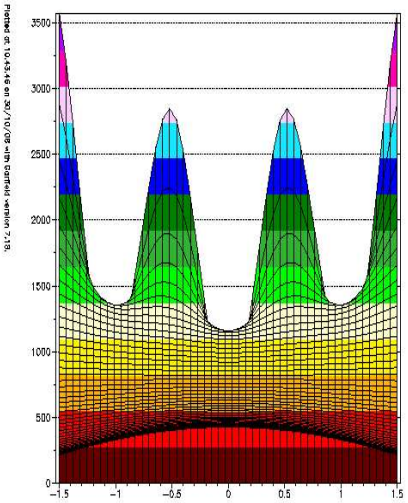
Projection on X axis



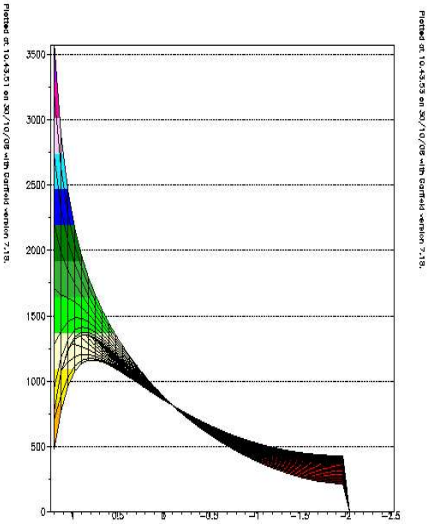
Projection on Y axis



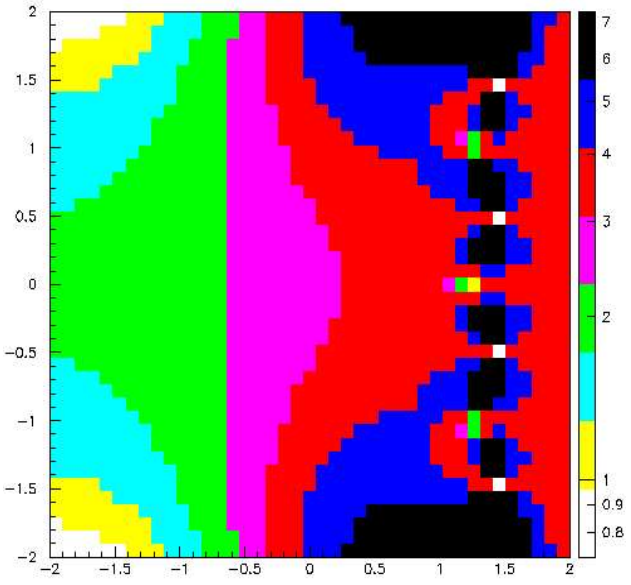
2D distribution E field
in area X(-1.5:1.5), Y(-2.5:1.1)



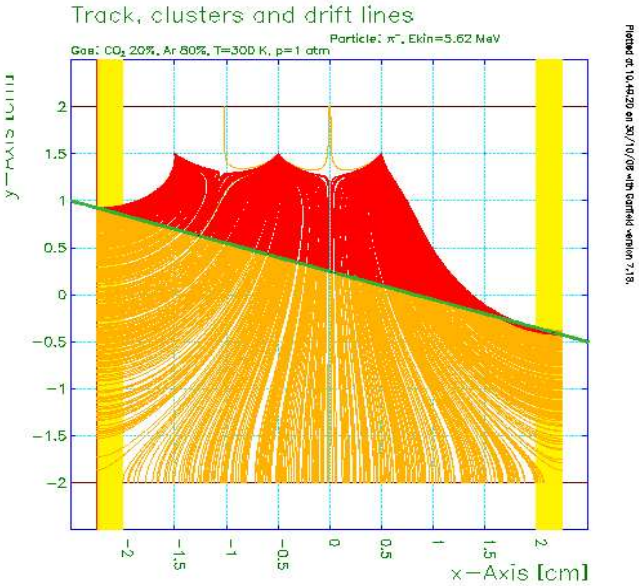
Projection on X axis



Projection on Y axis



2D distribution electrons drift velocity
in area X(-2.0:2.0), Y(-2.0:2.0)



Track, Clusters(green), Electrons drift lines
(red), Ions drift lines (brown)

Part 2

Planes: x = -2.25 cm, x = 2.25 cm, y = -2.0 cm, y = 2.0 cm.

Dielectricum (position (x_begin,x_end)): x(-2.25,-2.0), x(2.0,2.25)

Anodes wires (name wire Sx, position wire (x,y), wire voltage U_{sx}, wire diameter):

S1(-1.5,1.5), S2(-0.5,1.5), S3(0.5,1.5), S4(1.5,1.5)

$U_{s1} = U_{s2} = U_{s3} = U_{s4} = 9000$ V diameter = 0.0020 cm

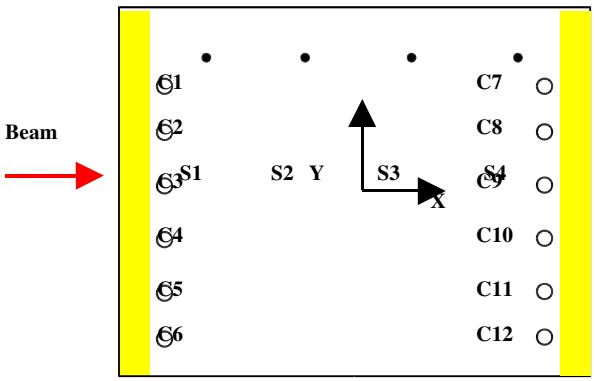
Field wires (name wire Cx, position wire (x,y), wire voltage U_{cx}, wire diameter):

C1(-1.9,1.0), C2(-1.9,0.5), C3(-1.9,0.0), C4(-1.9,0.5), C5(-1.9,1.0), C6(-1.9,1.5)

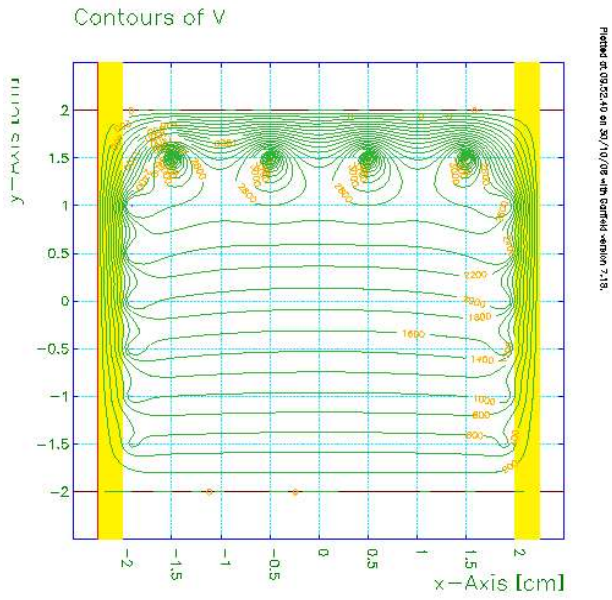
C7(1.9,1.0), C8(1.9,0.5), C9(1.9,0.0), C10(1.9,0.5), C11(1.9,1.0), C12(1.9,1.5)

$U_{c1} = U_{c7} = 5200$ V, $U_{c2} = U_{c8} = 4200$ V, $U_{c3} = U_{c8} = 3300$ V,

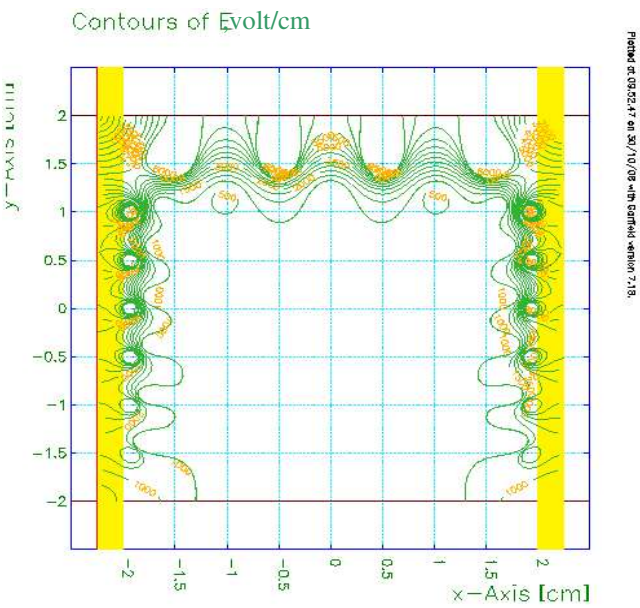
$U_{c4} = U_{c9} = 2600$ V, $U_{c5} = U_{c10} = 1600$ V, $U_{c6} = U_{c12} = 900$ V diameter = 0.0100 cm



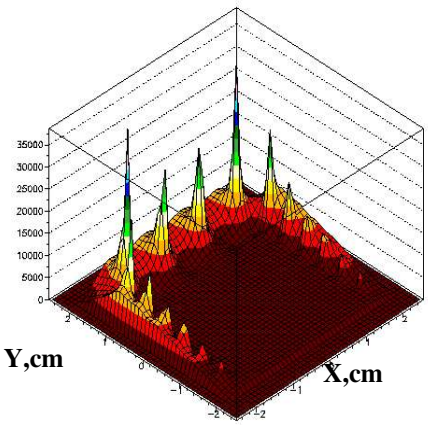
,volt



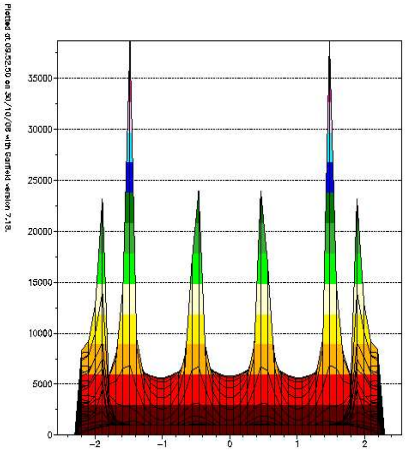
Contours distribution potential



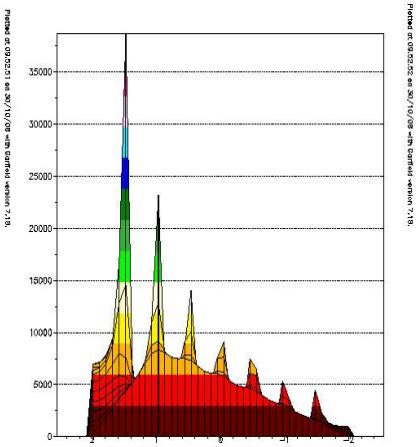
Contours distribution E field



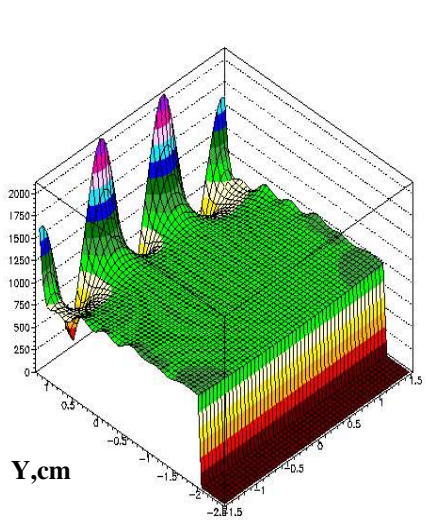
2D distribution E field
by the all area on X and Y axis



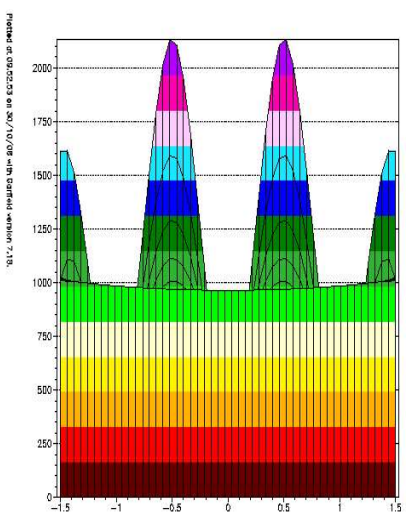
Projection on X axis



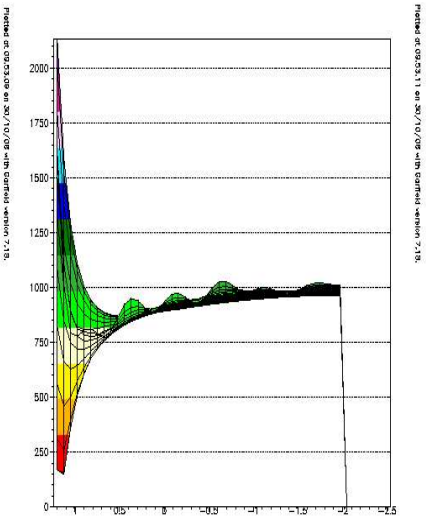
Projection on Y axis



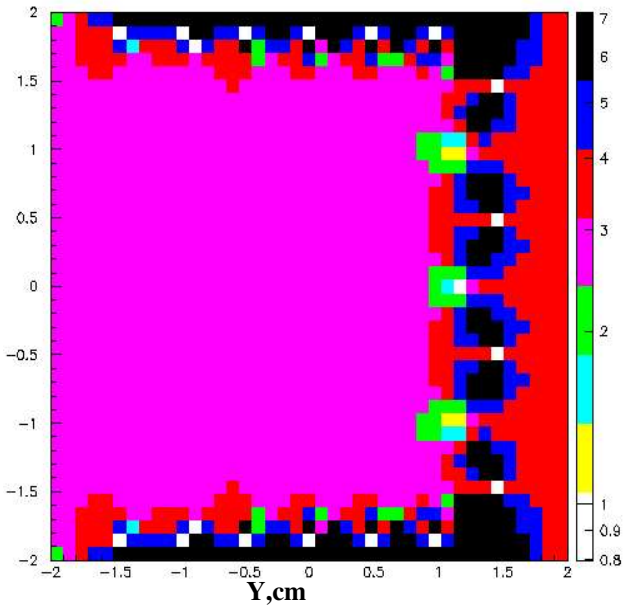
2D distribution E field
in area X(-1.5:1.5), Y(-2.5:1.1)



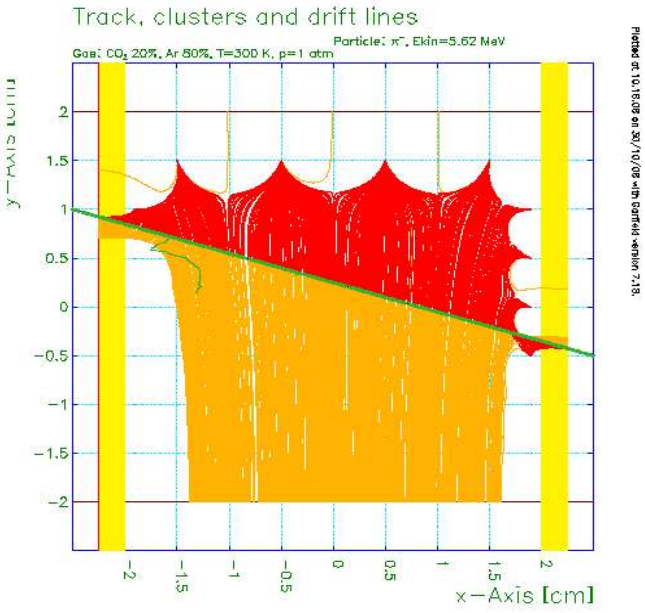
Projection on X axis



Projection on Y axis



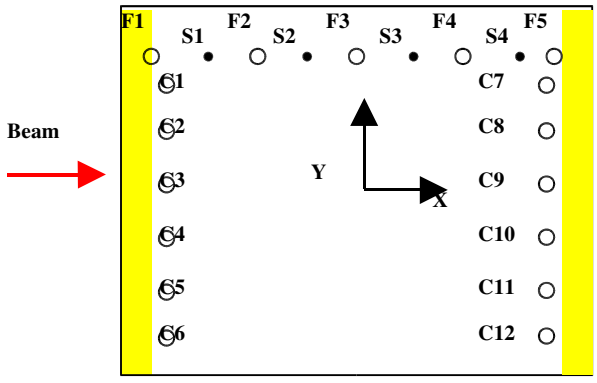
2D distribution electrons drift velocity
in area X(-2.0:2.0), Y(-2.0:2.0)

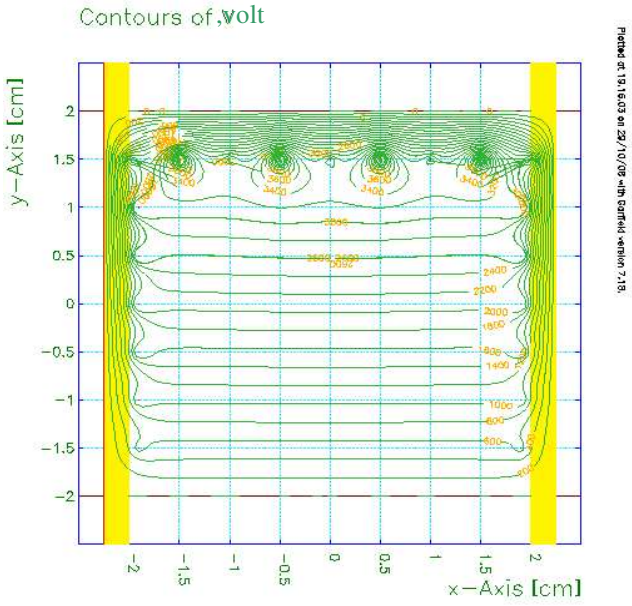


Track, Clusters(green), Electrons drift lines
(red), Ions drift lines (brown)

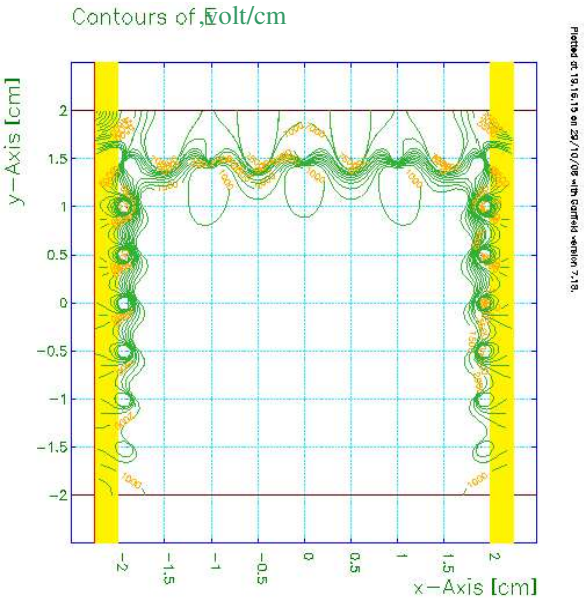
Part 3

Planes: x = -2.25 cm, x = 2.25 cm, y = -2.0 cm, y = 2.0 cm.
Dielectricum (position (x_begin,x_end)): x(-2.25,-2.0), x(2.0,2.25)
Anodes wires (name wire Sx, position wire (x,y), wire voltage U_{sx}, wire diameter):
S1(-1.5,1.5), S2(-0.5,1.5), S3(0.5,1.5), S4(1.5,1.5)
$U_{s1} = U_{s2} = U_{s3} = U_{s4} = 9000$ V diameter = 0.0020 cm
Field wires (name wire Cx, position wire (x,y), wire voltage U_{cx}, wire diameter):
C1(-1.9,1.0), C2(-1.9,0.5), C3(-1.9,0.0), C4(-1.9,0.5), C5(-1.9,1.0), C6(-1.9,1.5)
C7(1.9,1.0), C8(1.9,0.5), C9(1.9,0.0), C10(1.9,0.5), C11(1.9,1.0), C12(1.9,1.5)
$U_{c1} = U_{c7} = 5200$ V, $U_{c2} = U_{c8} = 4200$ V, $U_{c3} = U_{c8} = 3300$ V,
$U_{c4} = U_{c9} = 2600$ V, $U_{c5} = U_{c10} = 1600$ V, $U_{c6} = U_{c12} = 900$ V diameter = 0.0100 cm
Field wires (name wire Fx, position wire (x,y), wire voltage U_{fx}, wire diameter):
F1(-2.0,1.5), F2(-1.0,1.5), F3(0.0,1.5), F4(1.0,1.5), F5(2.0,1.5)
$U_{f1} = U_{f2} = U_{f3} = U_{f4} = U_{f5} = 4000$ V diameter = 0.0100 cm

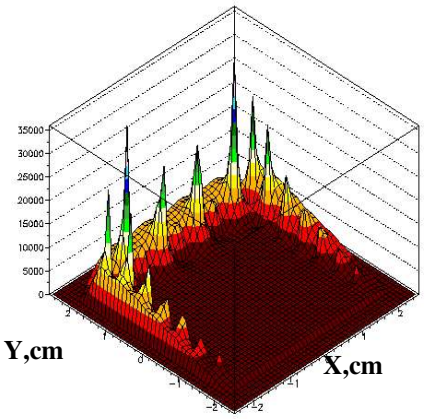




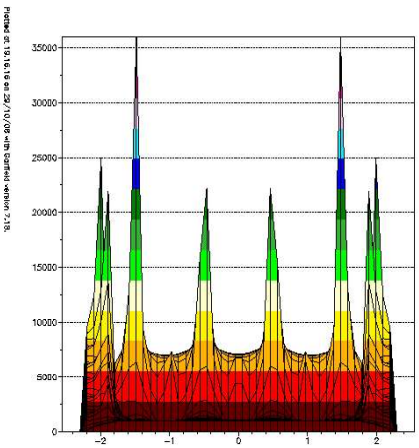
Contours distribution potential



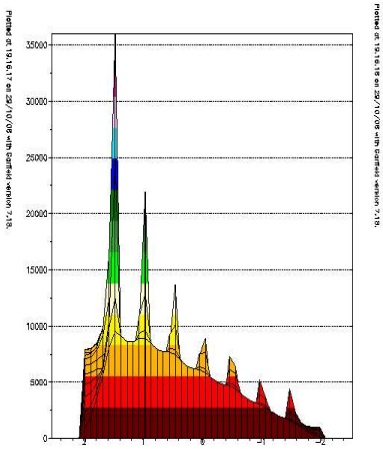
Contours distribution E field



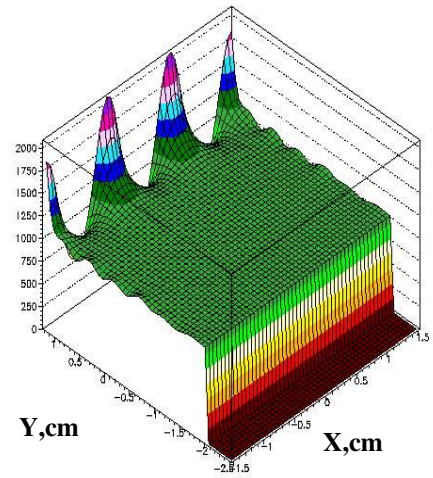
2D distribution E field
by the all area on X and Y axis



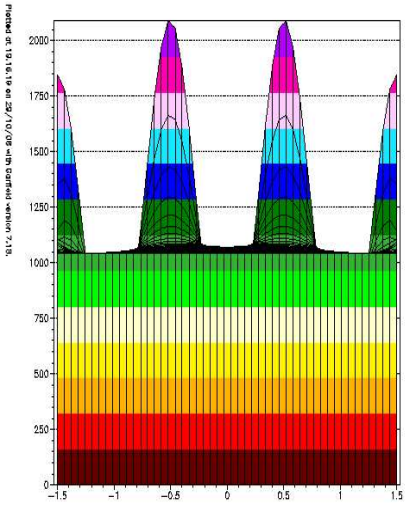
Projection on X axis



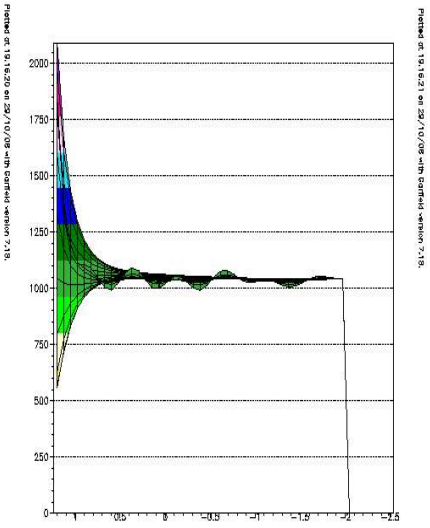
Projection on Y axis



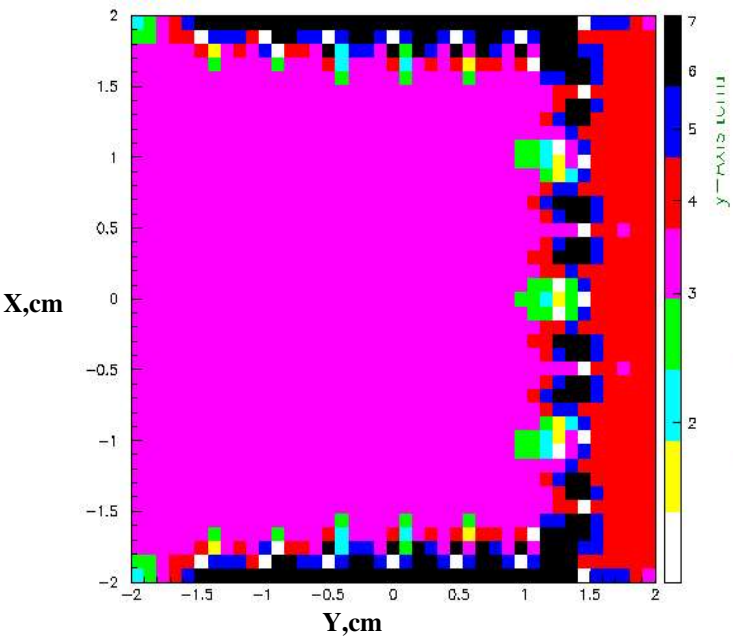
2D distribution E field
in area X(-1.5:1.5), Y(-2.5:1.1)



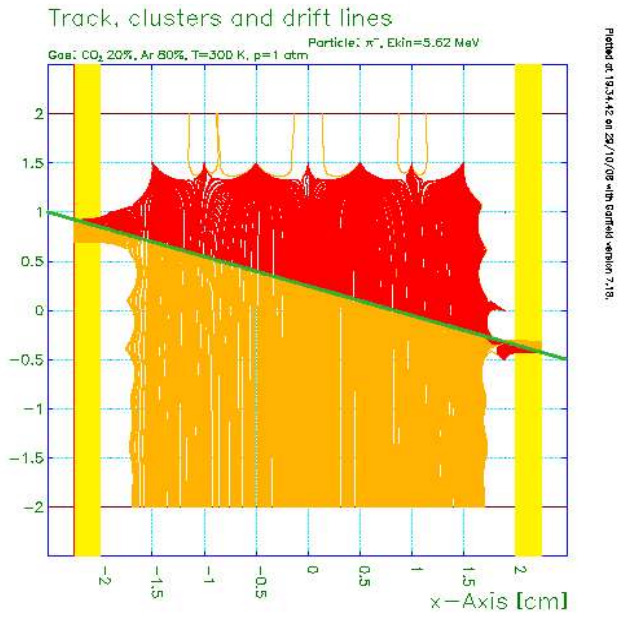
Projection on X axis



Projection on Y axis



2D distribution electrons drift velocity in area X(-2.0:2.0), Y(-2.0:2.0)



Track, Clusters(green), Electrons drift lines (red), Ions drift lines (brown)