

1 cm acrylic HHV shield configuration as from DRIFT

2 back to back TPCs

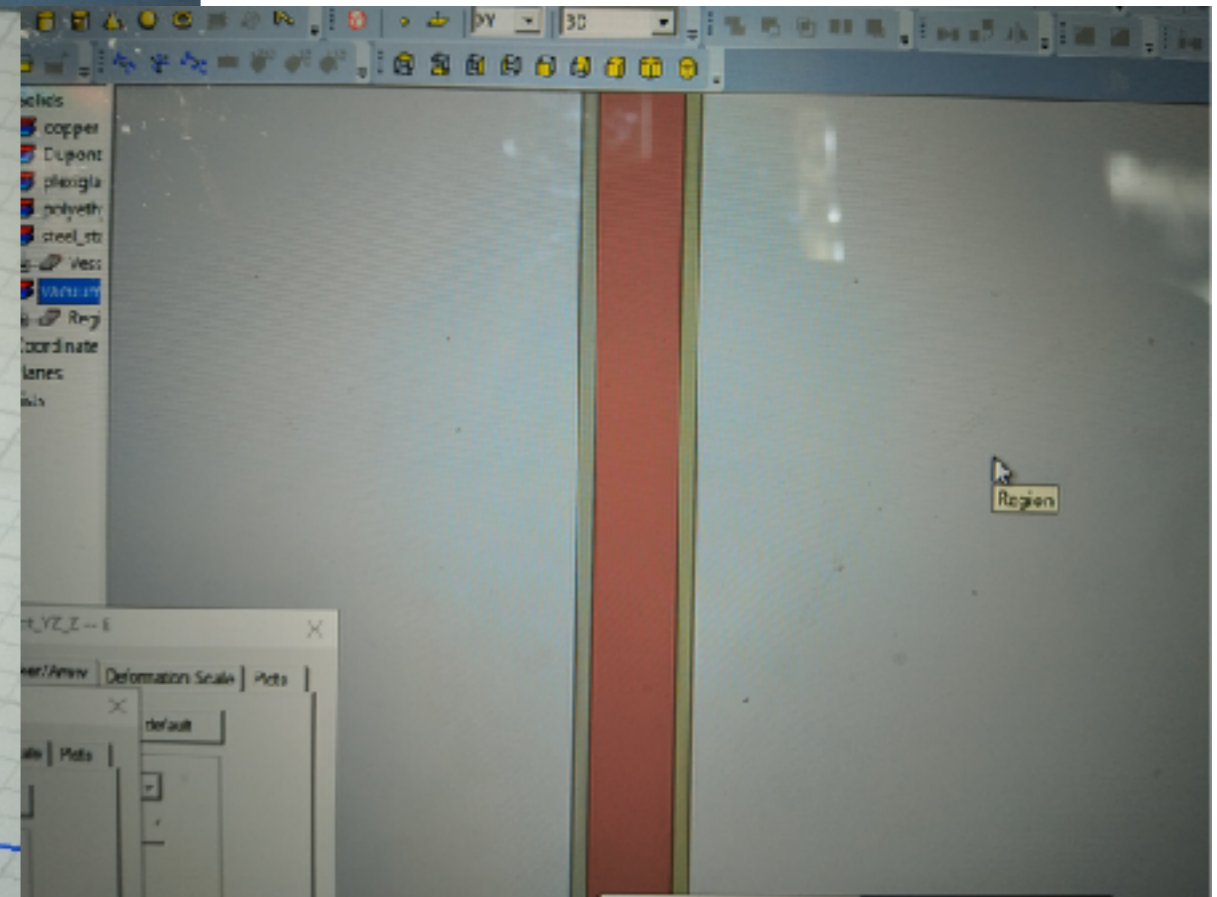
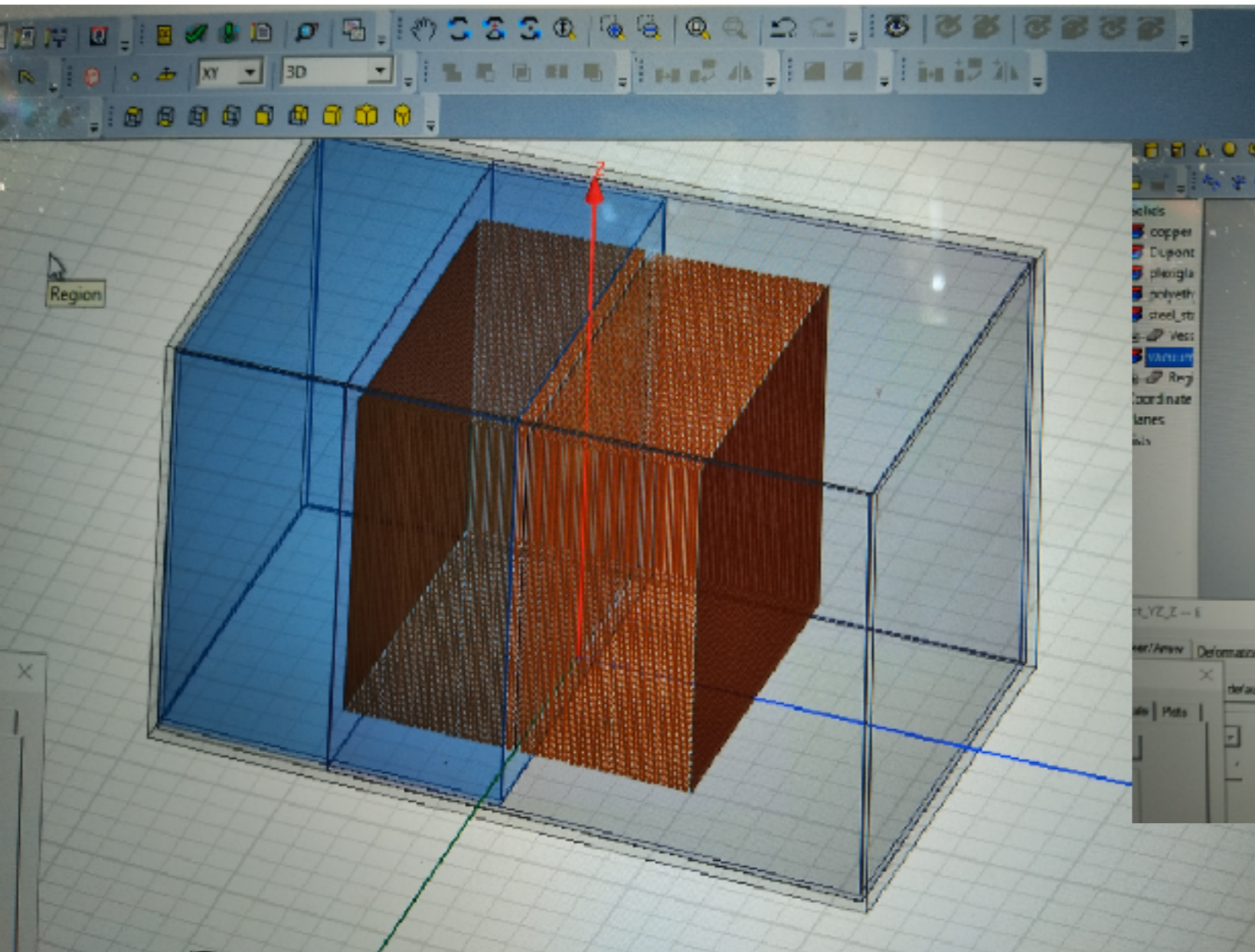
50 cm drift

1 cm field cage SQUARE ring

1 x 1 m² square area

1 kV/cm

1 cm pitch



20 um cathode

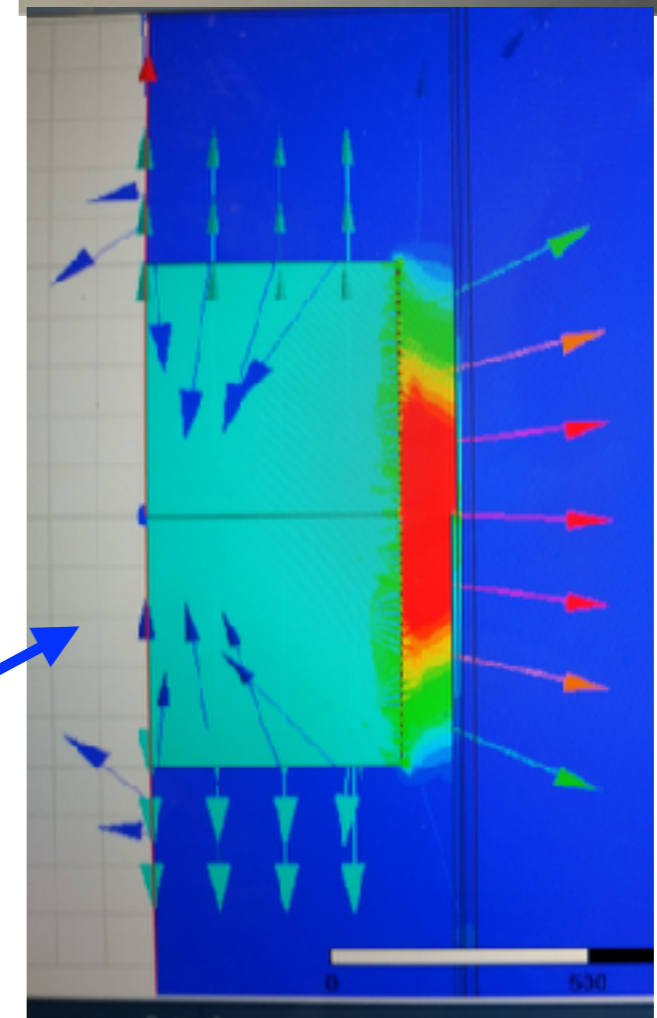
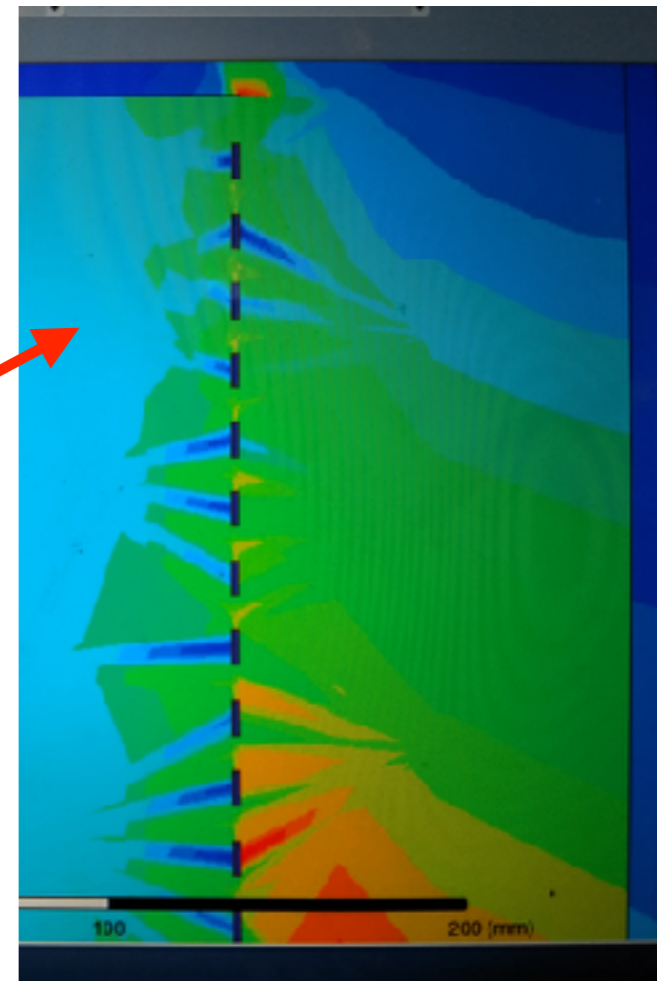
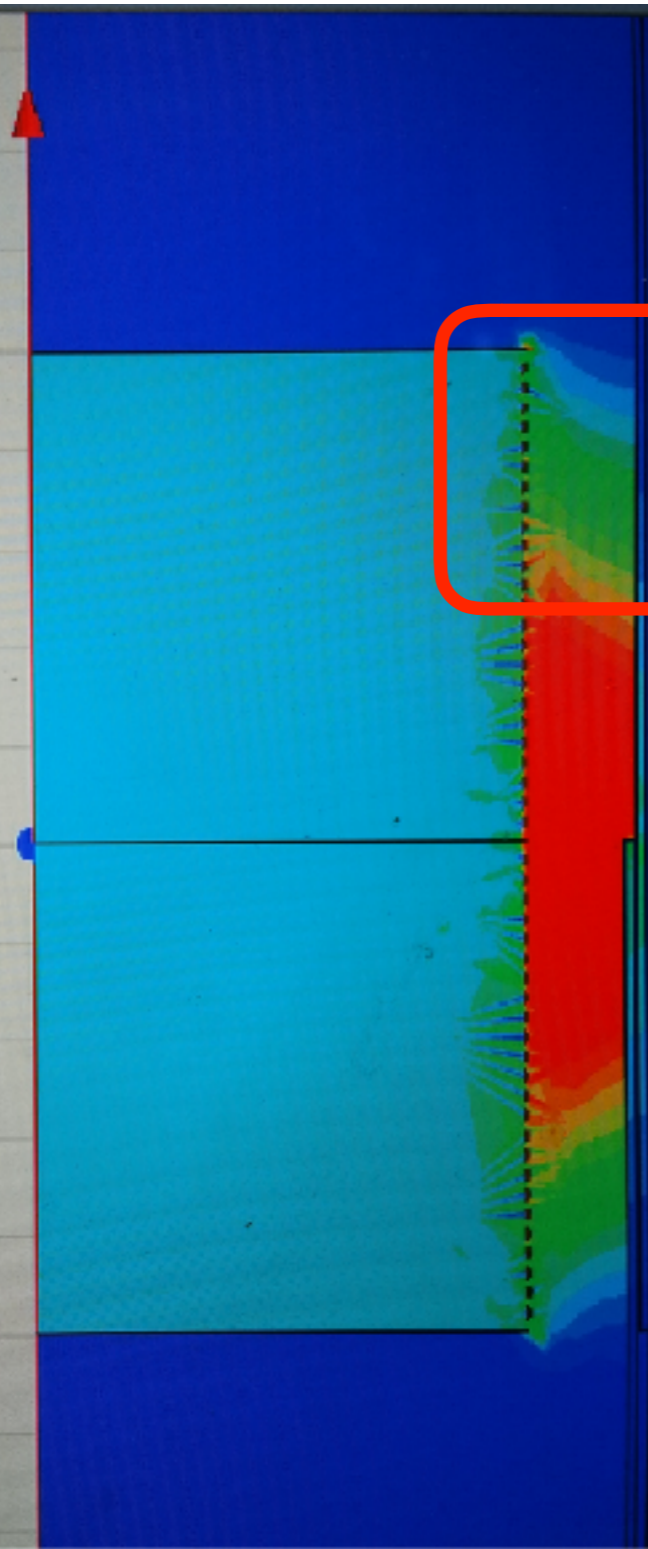
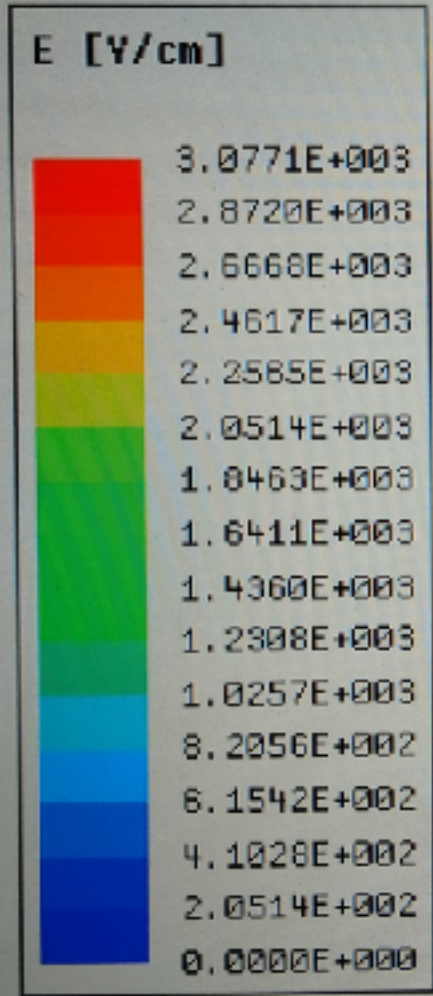
Vessel @ 0 V

20 um GEM copper @ 3000 V

1000 um GEM kapton

20 um GEM copper @ 0 V

field non-uniformity up to \pm 5 cm inside cage



why field line toward center??

2 back to back TPCs

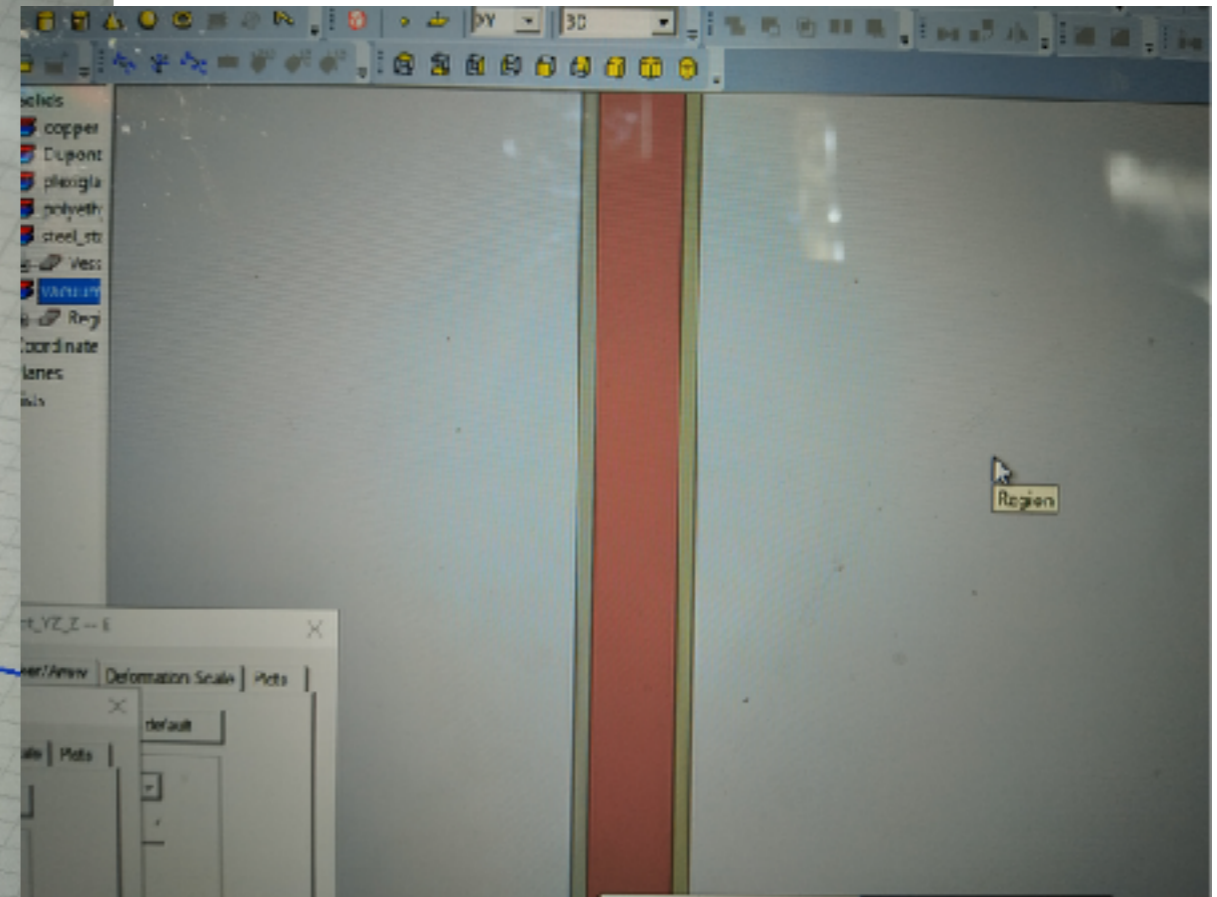
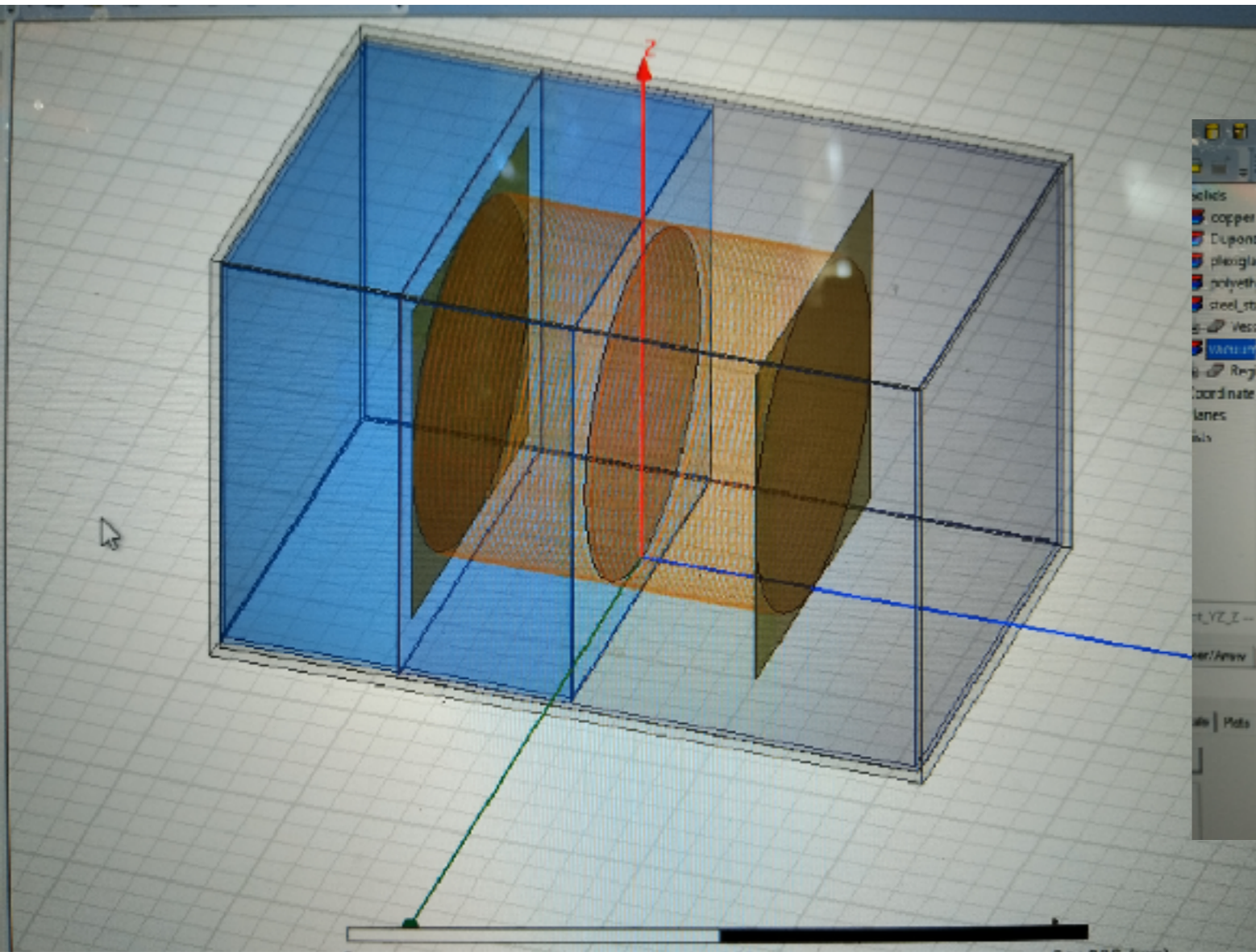
50 cm drift

1 cm field cage TORUS-like ring

1 m diameter round area

1 kV/cm

1 cm pitch



20 um **ROUND** GEM copper @ 3000 V

1000 um **SQUARE** GEM kapton

20 um **ROUND** GEM copper @ 0 V

Vessel @ 0 V

much better uniformity than
cubic design

