

Simulation of Track Distortion due to Inhomogeneity of Electric Field in Micromegas modules

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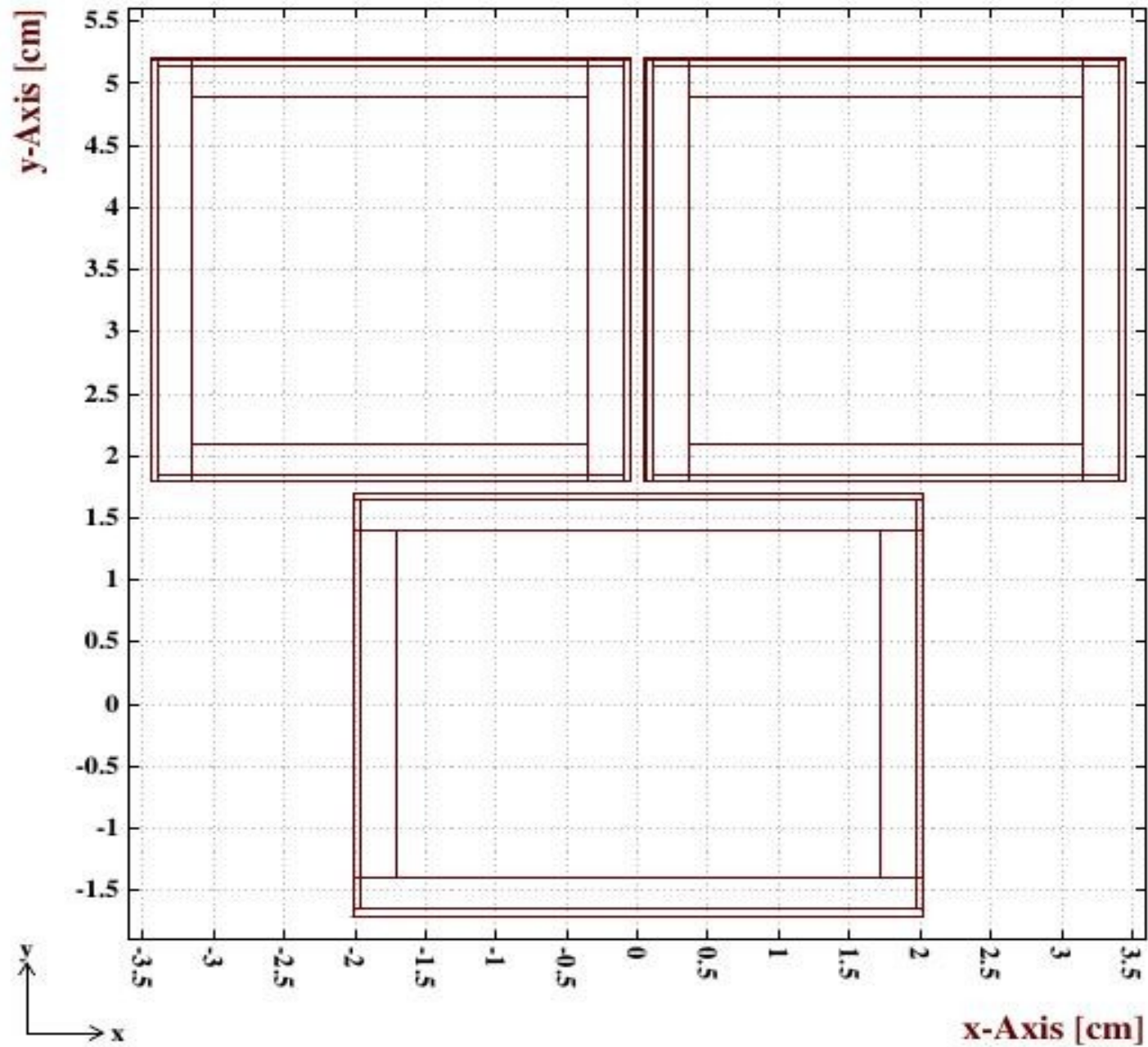
PhD student SINP, Kolkata & CEA Saclay

WP meeting

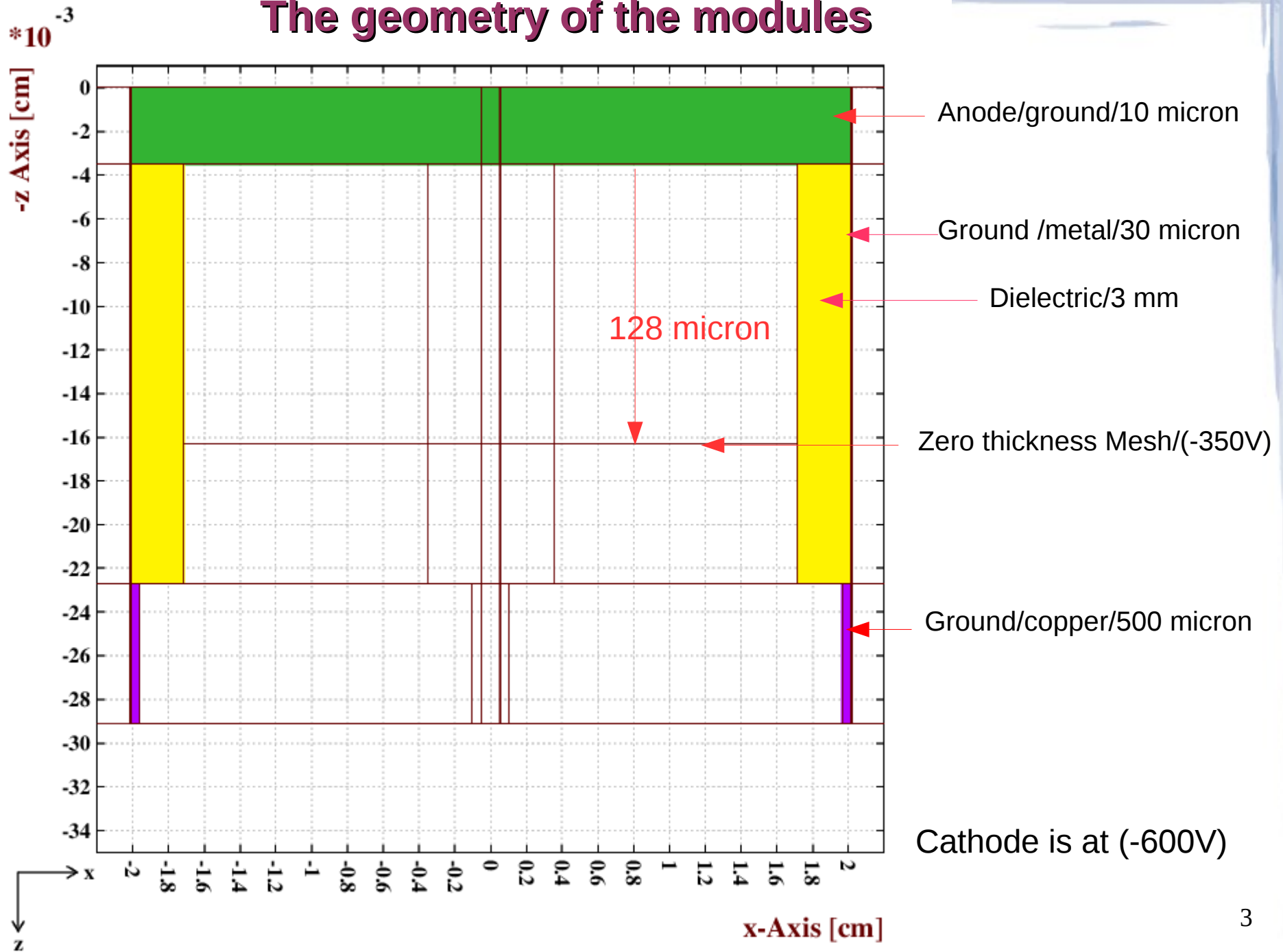
24 September 2015, SINP, Kolkata



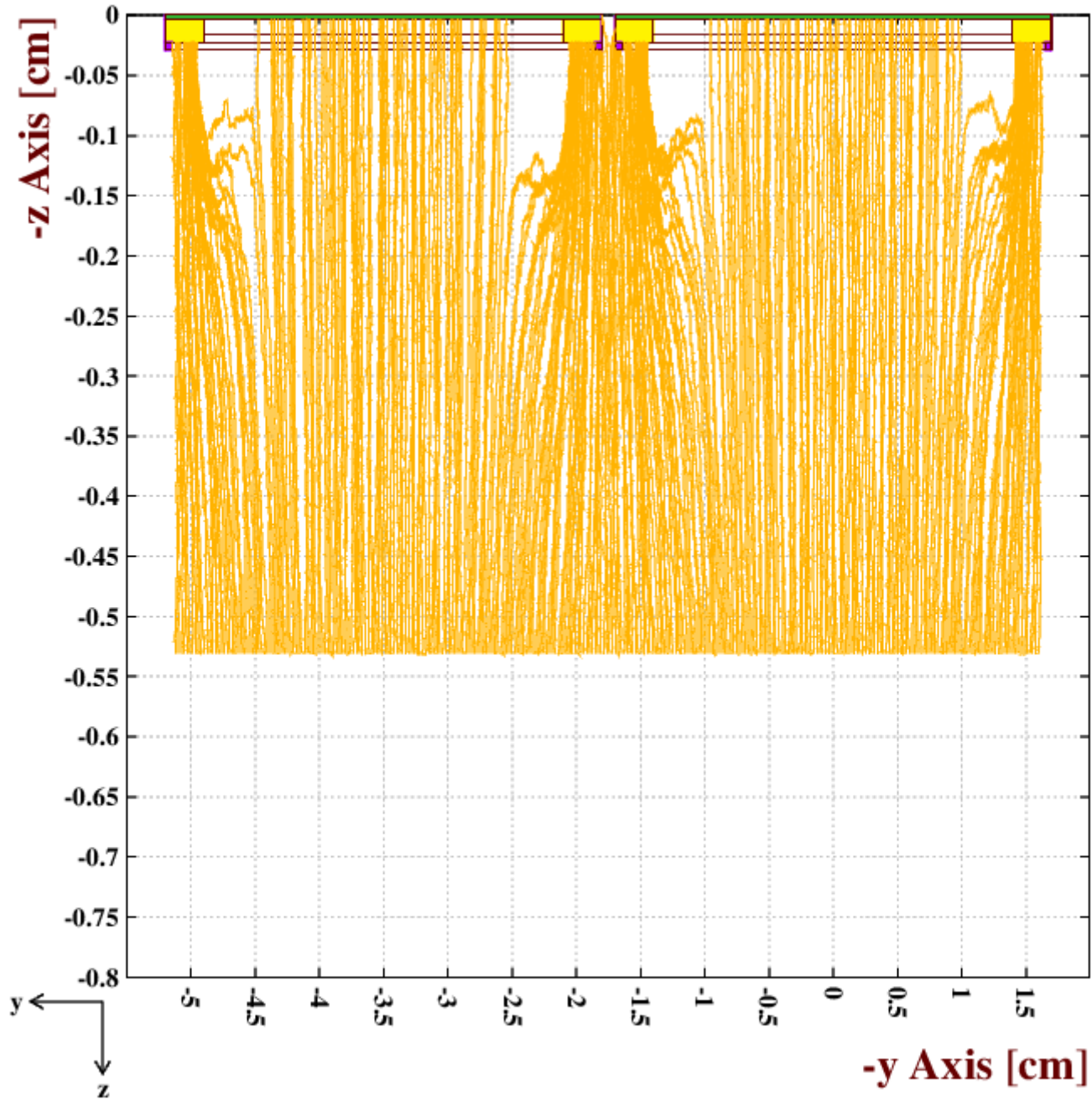
The module arrangement



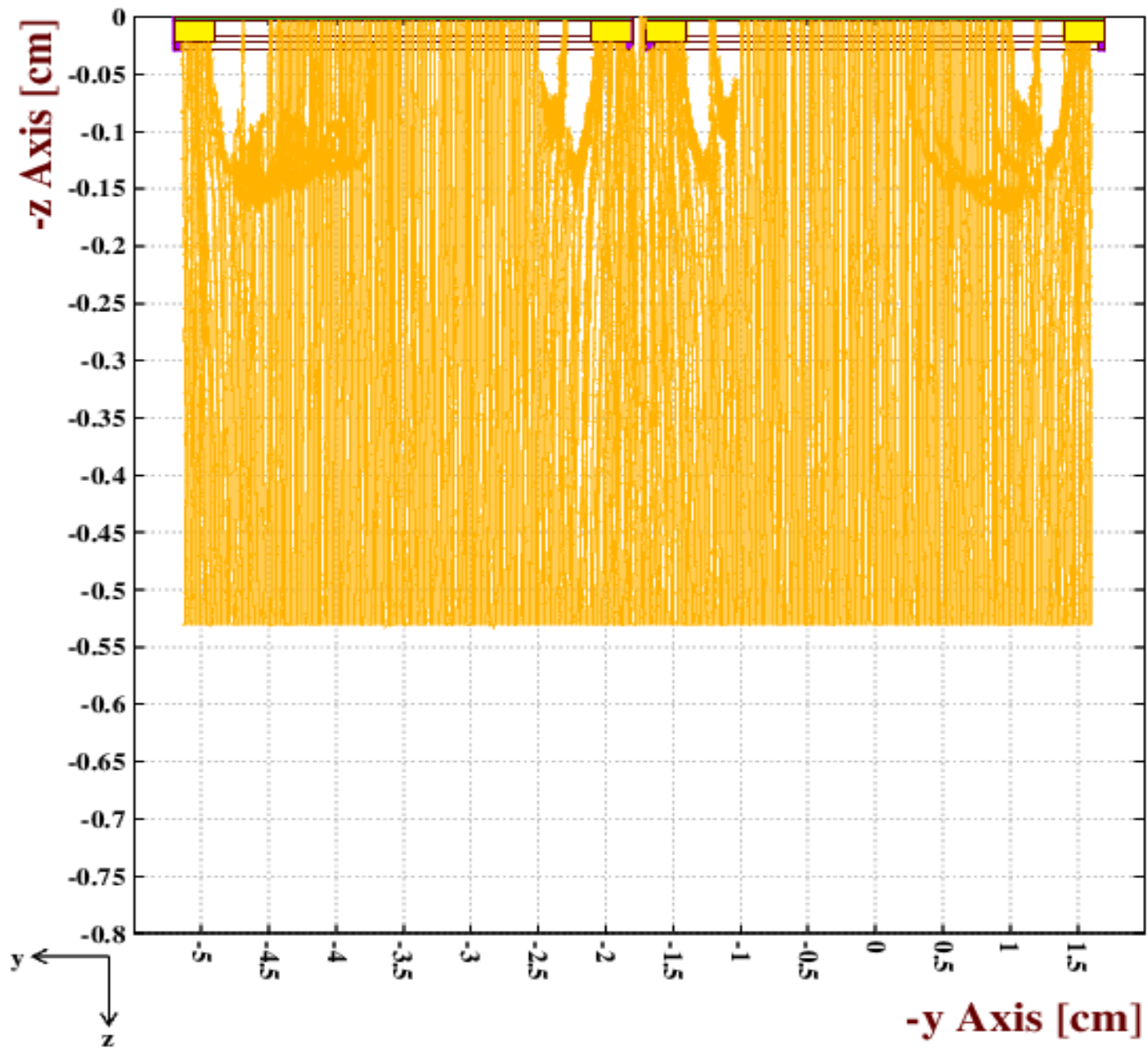
The geometry of the modules



Drift of electrons (Monte Carlo) with out Magnetic field

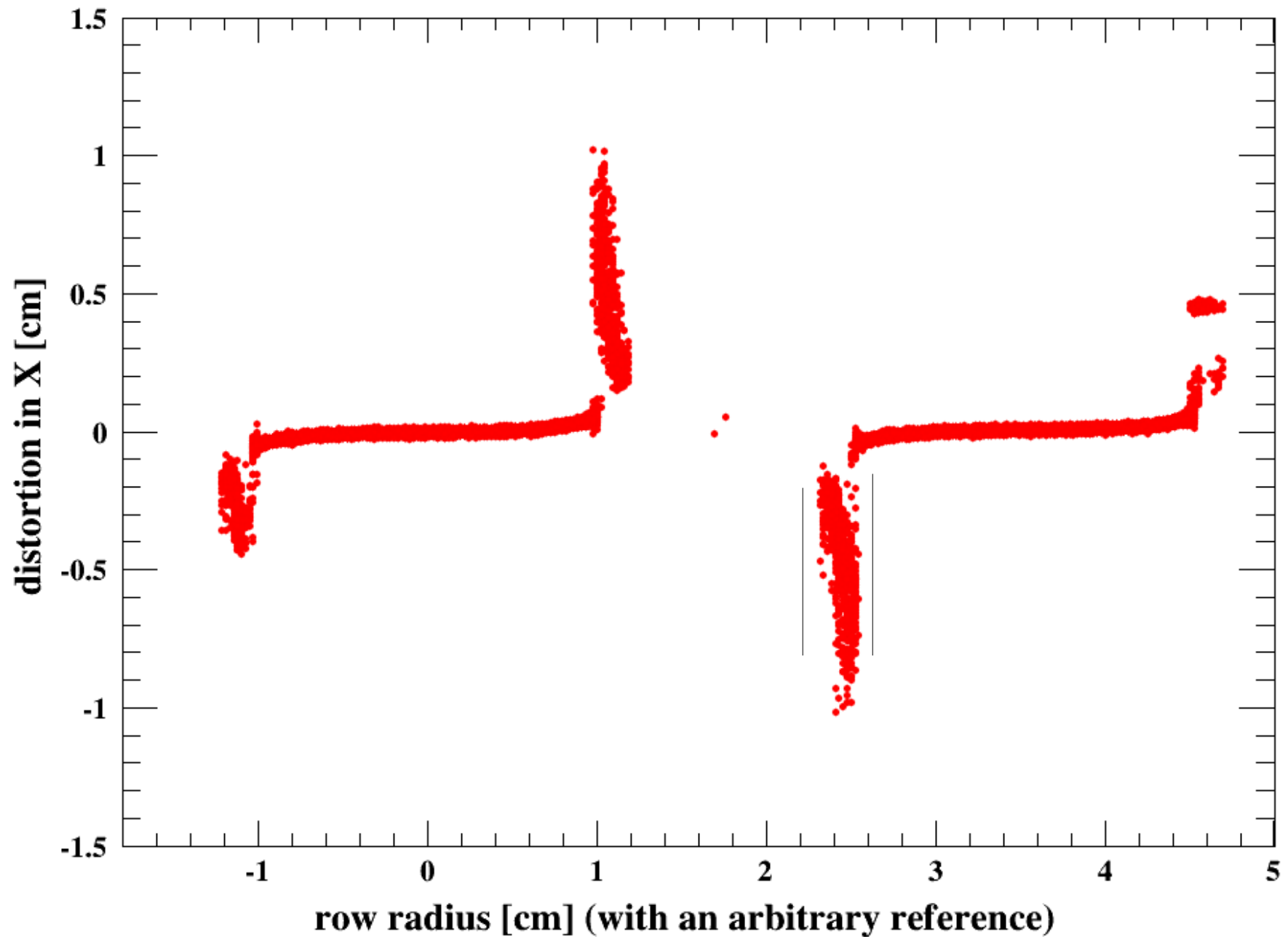


Drift of electrons (Monte Carlo) at 1 T Magnetic field



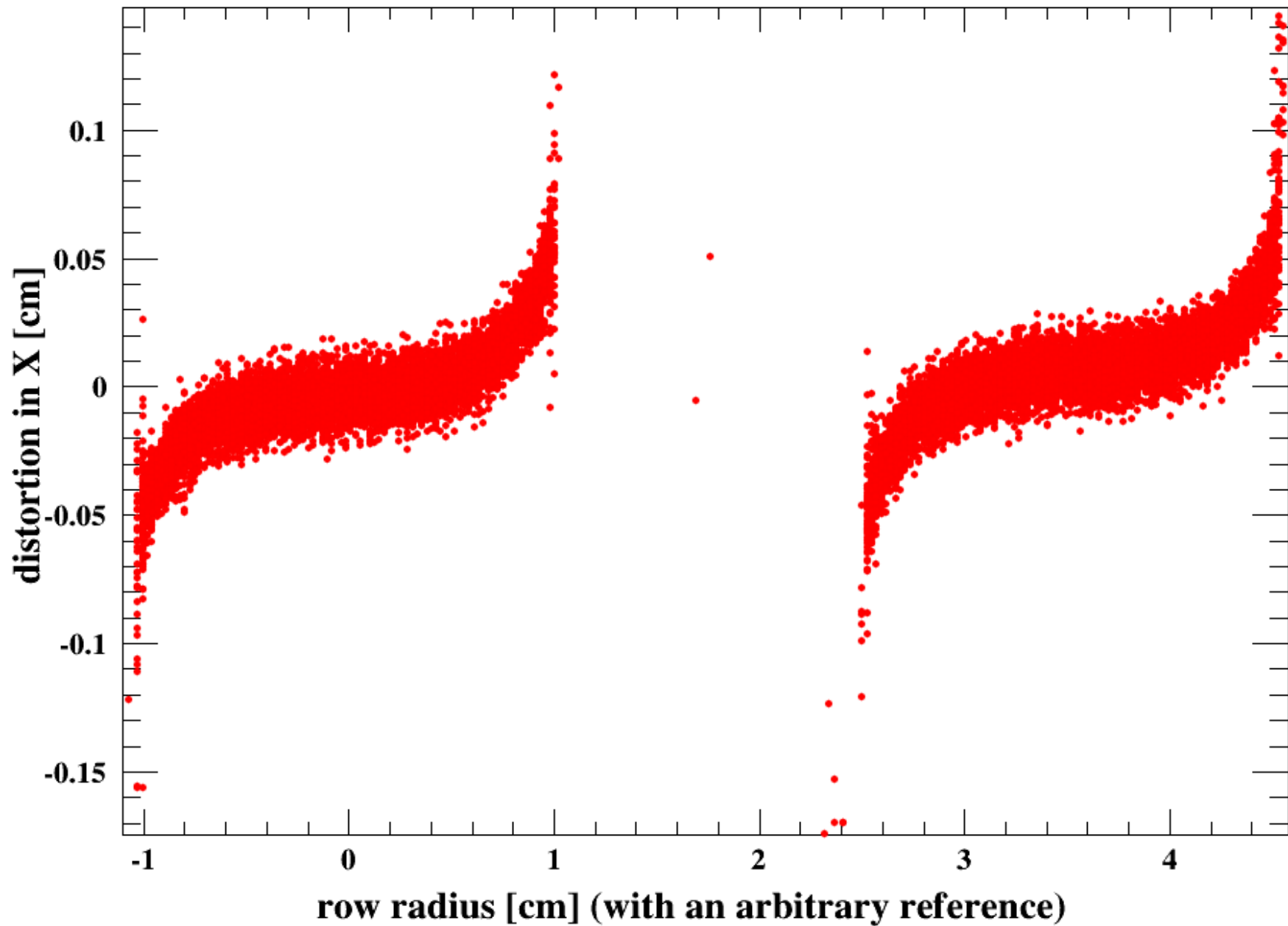
Simulation, preliminary results

Distortion in XY plane, B=1T, Z= 1cm

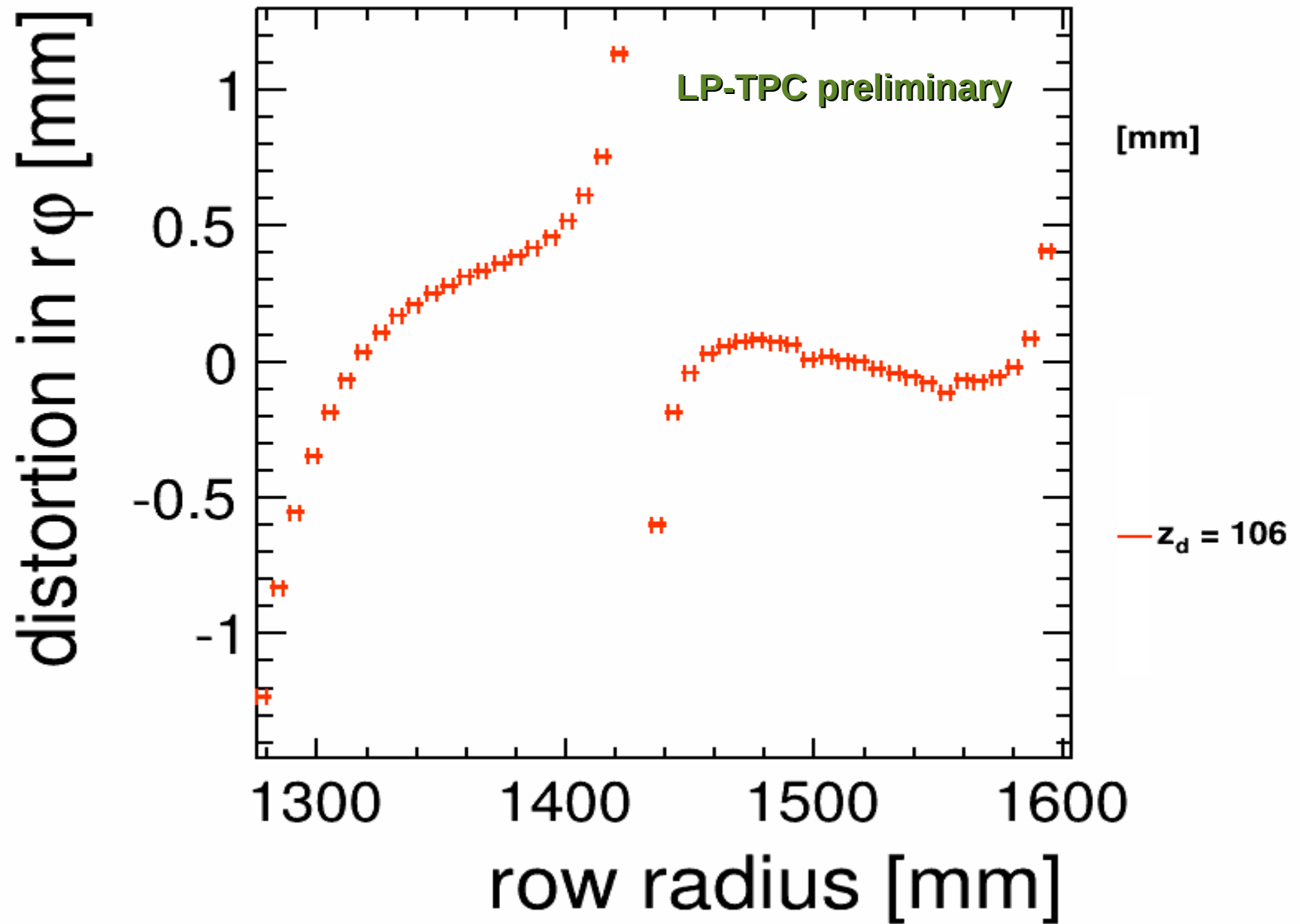


Simulation, preliminary results

Distortion in XY plane, B=1T, Z= 1cm

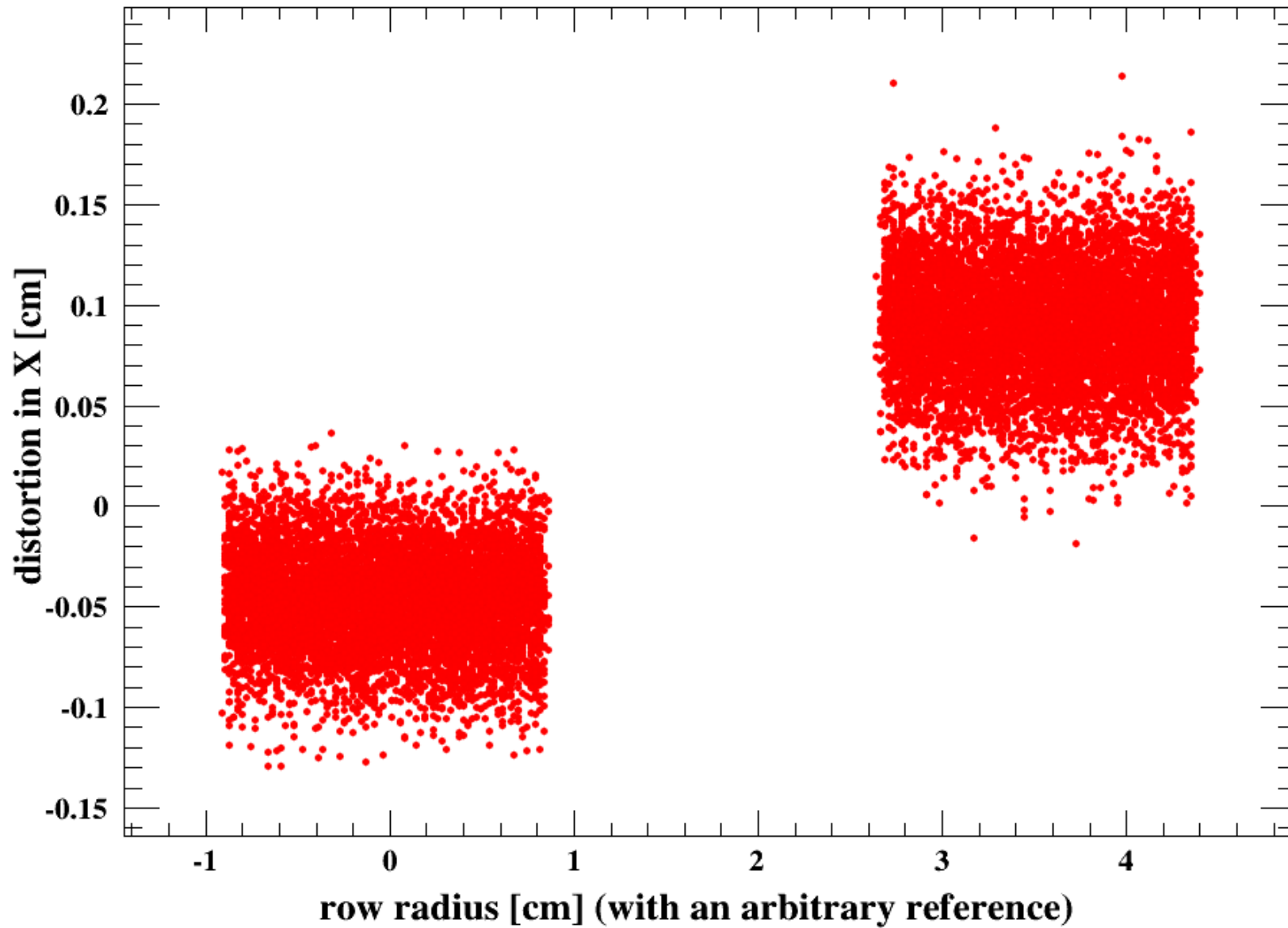


Distortion for two Micromegas modules at LP-TPC



Simulation, preliminary results

Distortion in XY plane, $B=0T$, $Z=1\text{cm}$



System used:

(1) DELL Precision T7500 Work Station/12 cores/ 72 GB RAM.

(2) Xeon cluster @ 1.2 GHz/6 cores/ 16 GB RAM.

Thank You

