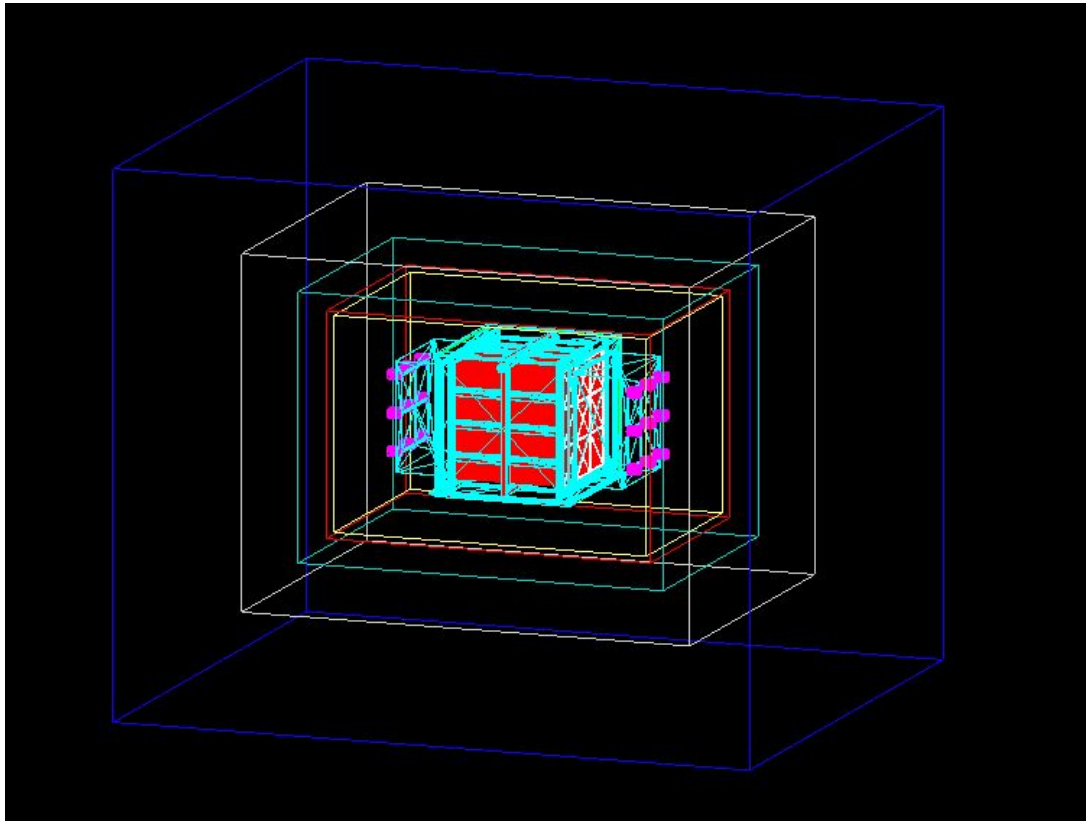


Update CYGNO simulation

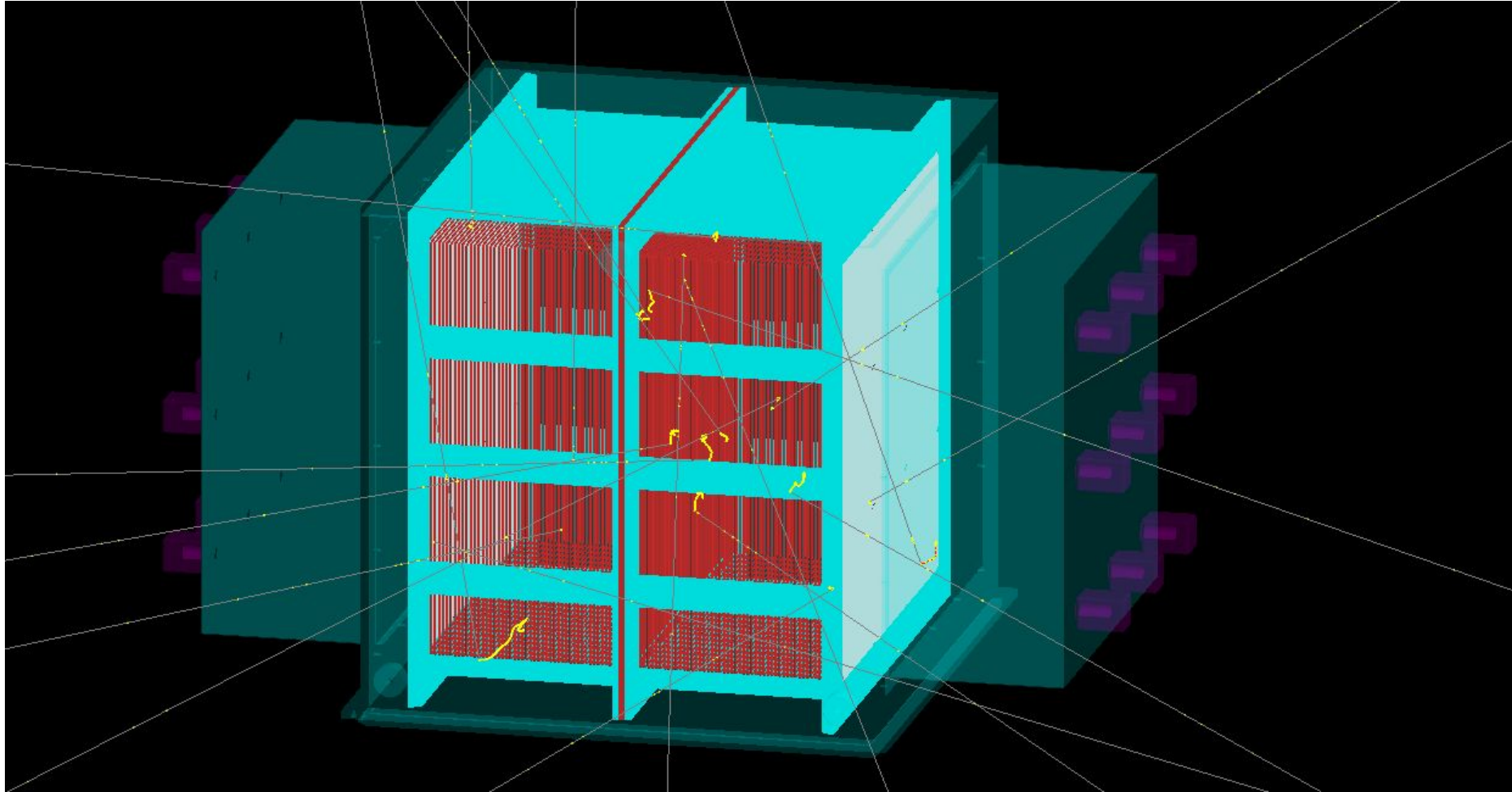
Giulia D'Imperio
30/05/2019

Geometry update

- New repository on github CYGNO area: <https://github.com/CYGNUS-RD/CYGN0-MC>
- Import from CAD geometry file from Sandro May 16
- Shielding from inside out: 5 cm copper, 20 cm lead, 40 cm polyethylene, 90 cm water



Example: ^{14}C decays in the gas



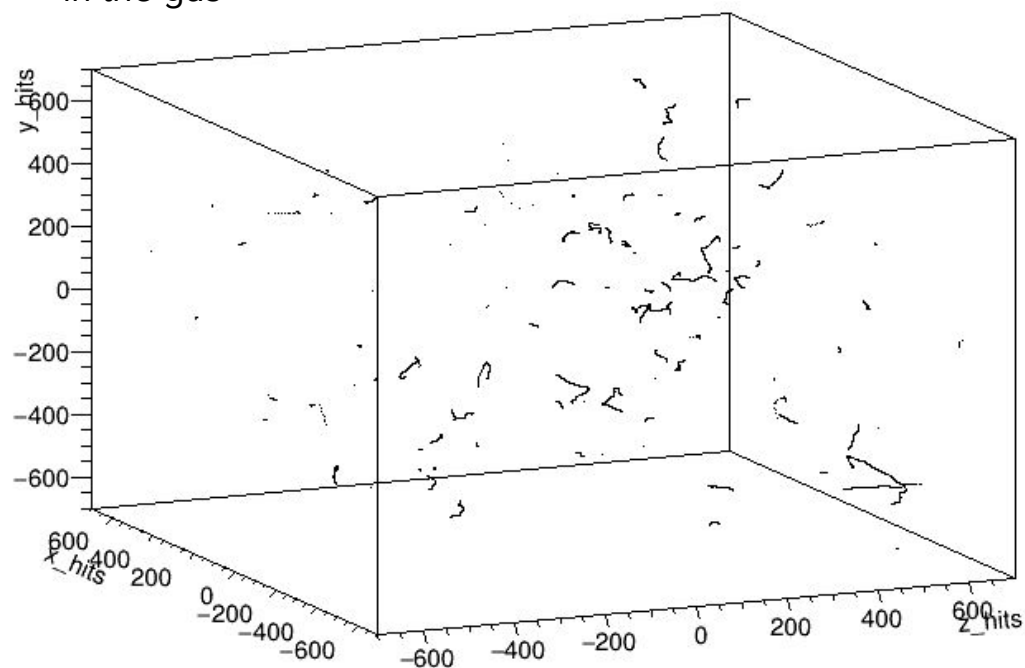
outgoing tracks are anti- ν from beta decay

Output root file

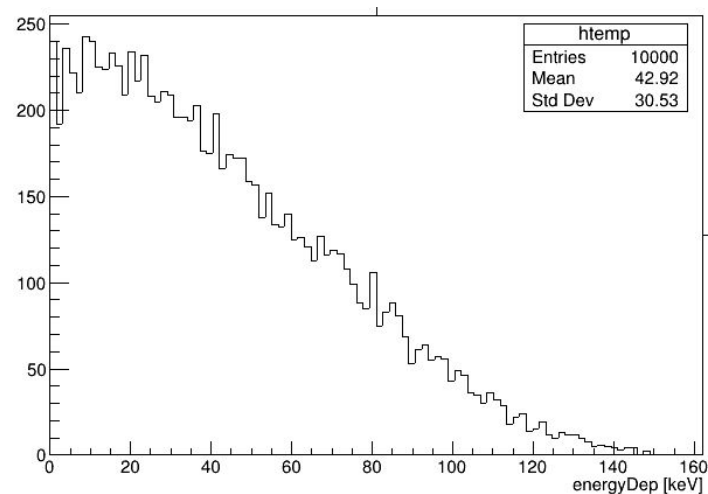
- Simulation time 26 evt/sec
- Output size 60 kB/evt

Example plots:

hit positions for 100 decays of ^{14}C
in the gas



energy spectrum in the gas



energy deposition in the gas per hit

