Highlights

Goal: Study of a possible use of a GEM detector (GEMPix) as beam monitor in hadrontherapy

→ High rate capability and Radiation hardness: high fluxes (10^8 particles/s) of carbon ions, protons, oxygen…

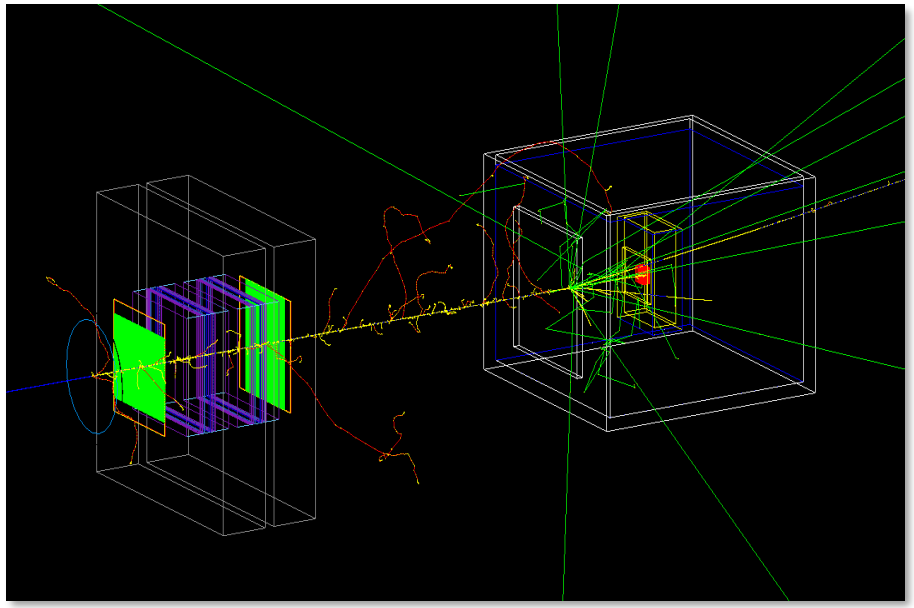
→ Good spatial resolution: Beam diagnostic for daily quality controls and dosimetric measurements of treatment plans.

Instruments: Accurate investigation of the detector response

→ Measurements at CNAO Centre

(Depth dose deposition, linearity, homogeneity)

→ Geant4 simulation of the detector and the experimental setup



Results: Good agreement between simulation and data

→ *Further experimental measurements at CNAO*

are going to be planned

→ *Ongoing simulation studies*