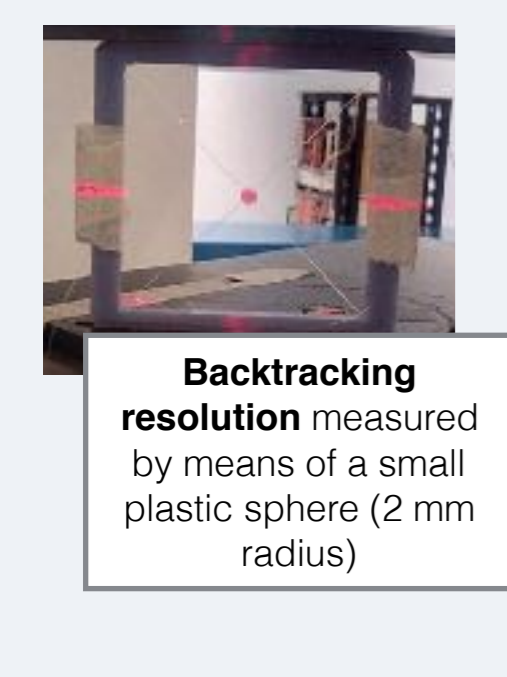
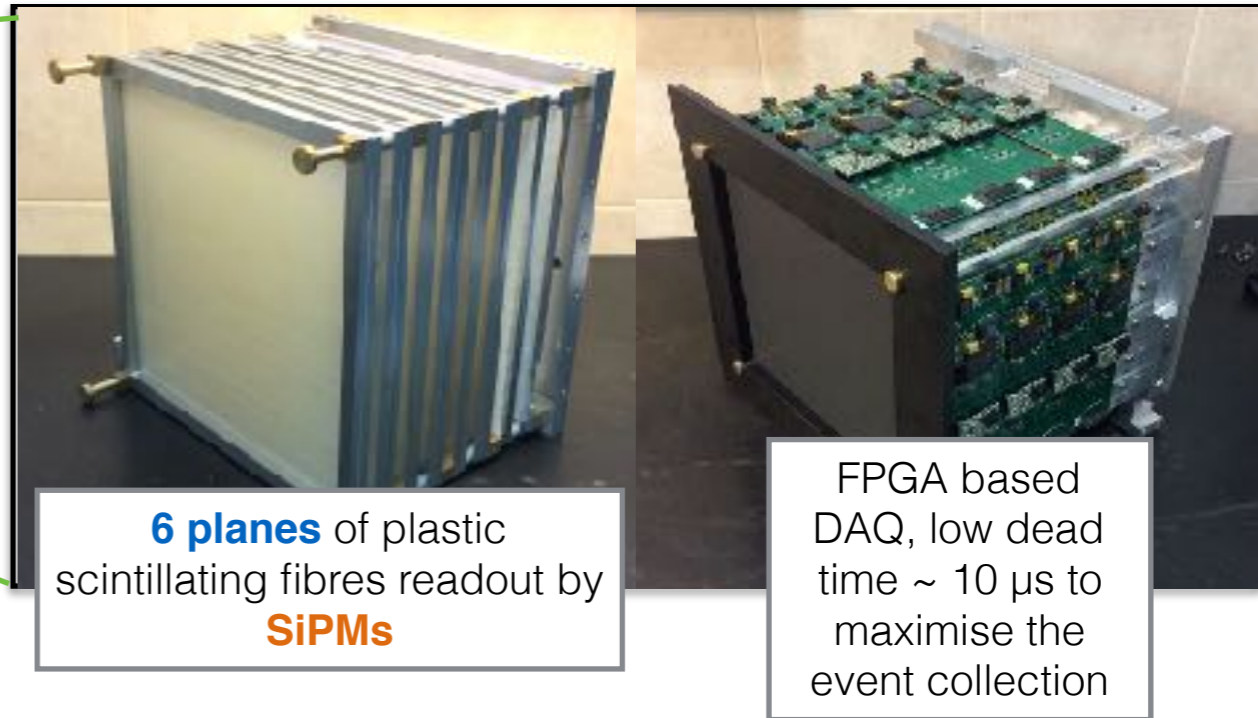
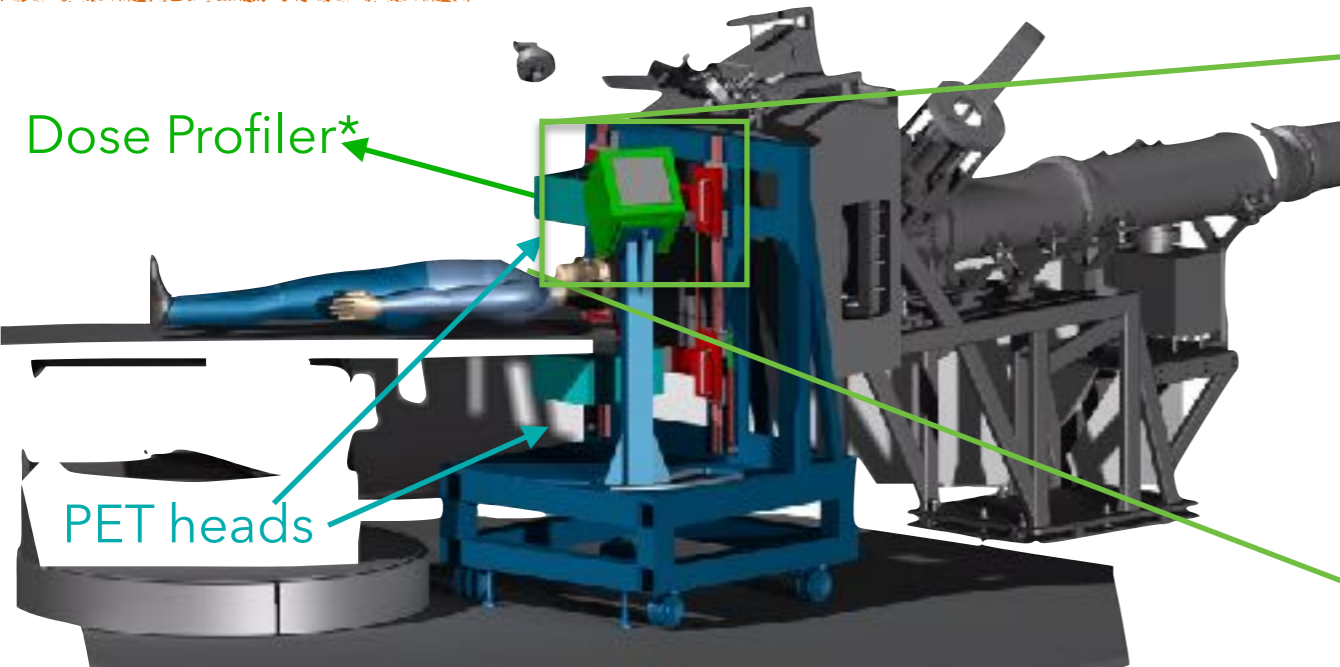


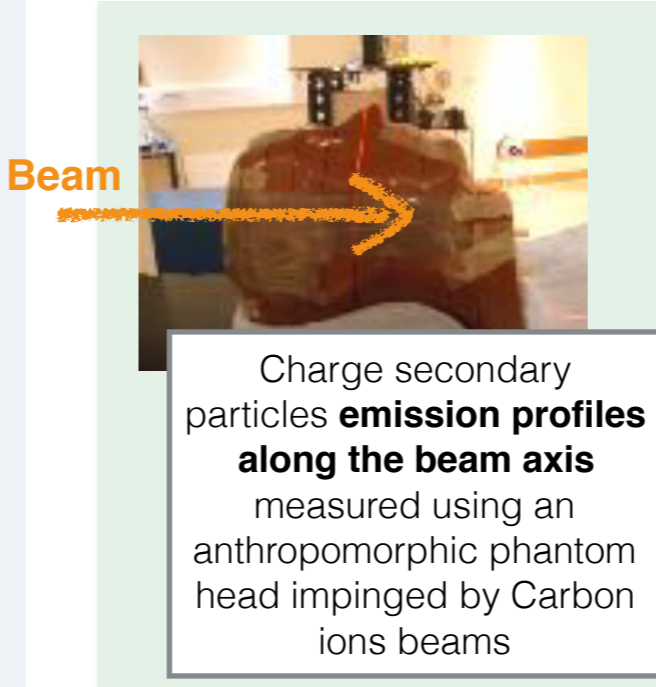
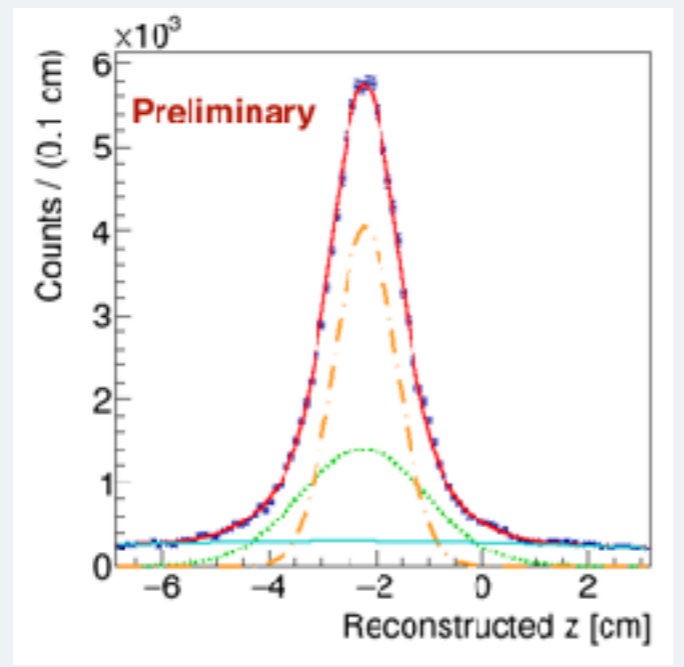


# In room characterisation, using an anthropomorphic phantom, of a novel detector exploiting secondary charged particles emission for online dose monitoring in light ions PT treatments

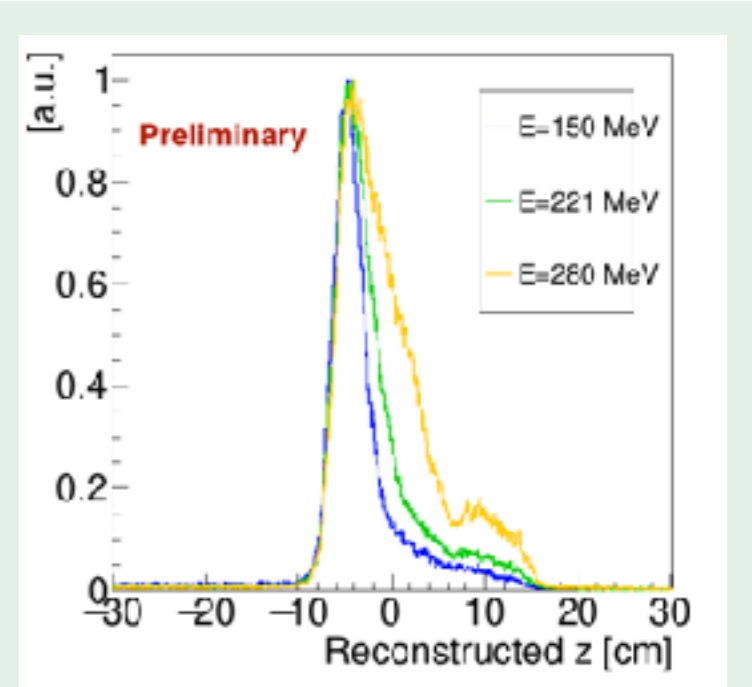
**E. Gioscio**, G. Battistoni, M. De Simoni, Y. Dong, M. Fischetti, C. Mancini-Terracciano, M. Marafini, I. Mattei, S. Muraro, A. Sarti, A. Sciubba, E. Solfaroli Camillocci, G. Traini, S.M. Valle, C. Voena, V. Patera



**Backtracking resolution** measured by means of a small plastic sphere (2 mm radius)



Charge secondary particles **emission profiles along the beam axis** measured using an anthropomorphic phantom head impinged by Carbon ions beams



\* G. Traini et al, Design of a new tracking device for on-line beam range monitor in carbon therapy Physica Medica 34 (2017) 18–27