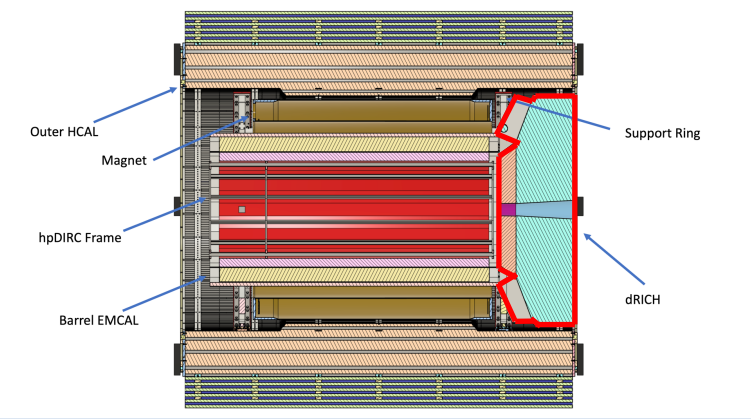
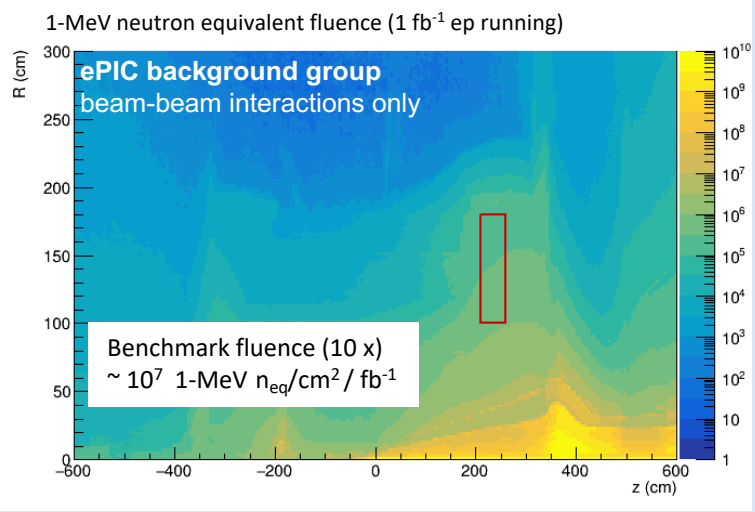
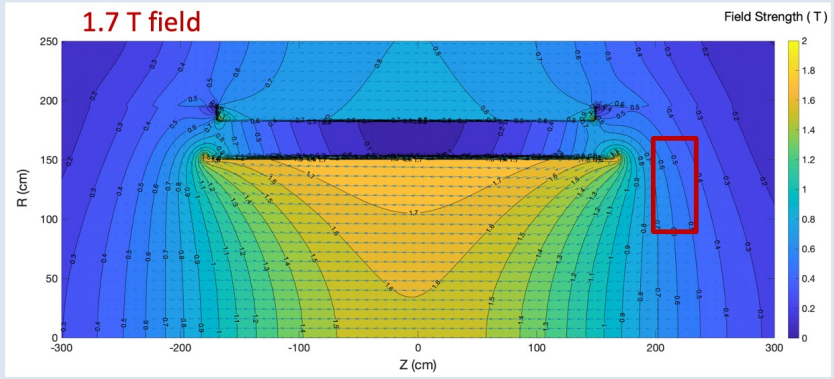
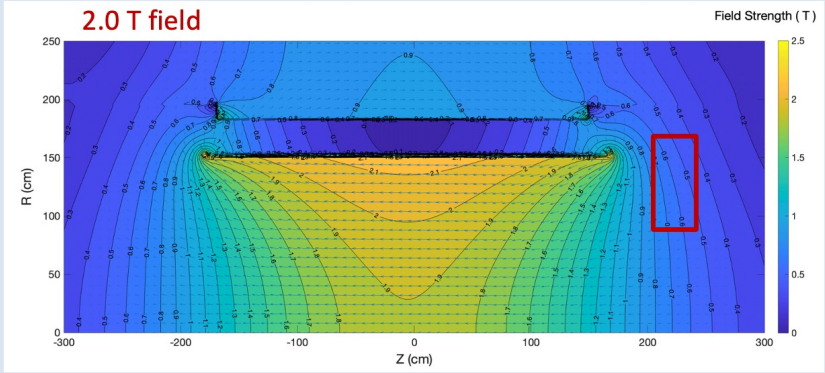
EPIC Environment









Strong (~ 0.7 T) magnetic field, not uniform

Moderate radiation level (~ 10^{10} n_{eq}/cm^2 after 1000 fb^{-1})

SiPM with low-T (< -30 C) working point and high-T (~ 150 C) annealing cycles

dRICH Irradiation necessities

Sensor & Electronics: **Regular activity ongoing (up to 10^{11} neq/cm^2)**

So far focussed on SiPM sensors, being extended to the electronics (ALCOR)

Possible synergies in testing RDO architecture (Artix Ultrascale+ FPGA and VTRx+ transceiver)

TIFPA Hadron facility at Trento, Italy (220 MeV, 10^{11} p/cm^2/s): protons (4 times this year)

INFN Laboratory of Legnaro, Italy (2 MeV, 10^5 n/cm^2/s) : neutrons (1 time ths year)

ISS at Rome: gammas (potential)

Mechanics & Mirrors: **No clear necessity**

Plan to use materials already in use at LHC:

carbon fiber + Al composites, quartz windows, sealing materials, glues

Radiators: **No clear necessity**

Aerogel (quartz foam) and gas (regularly purged)