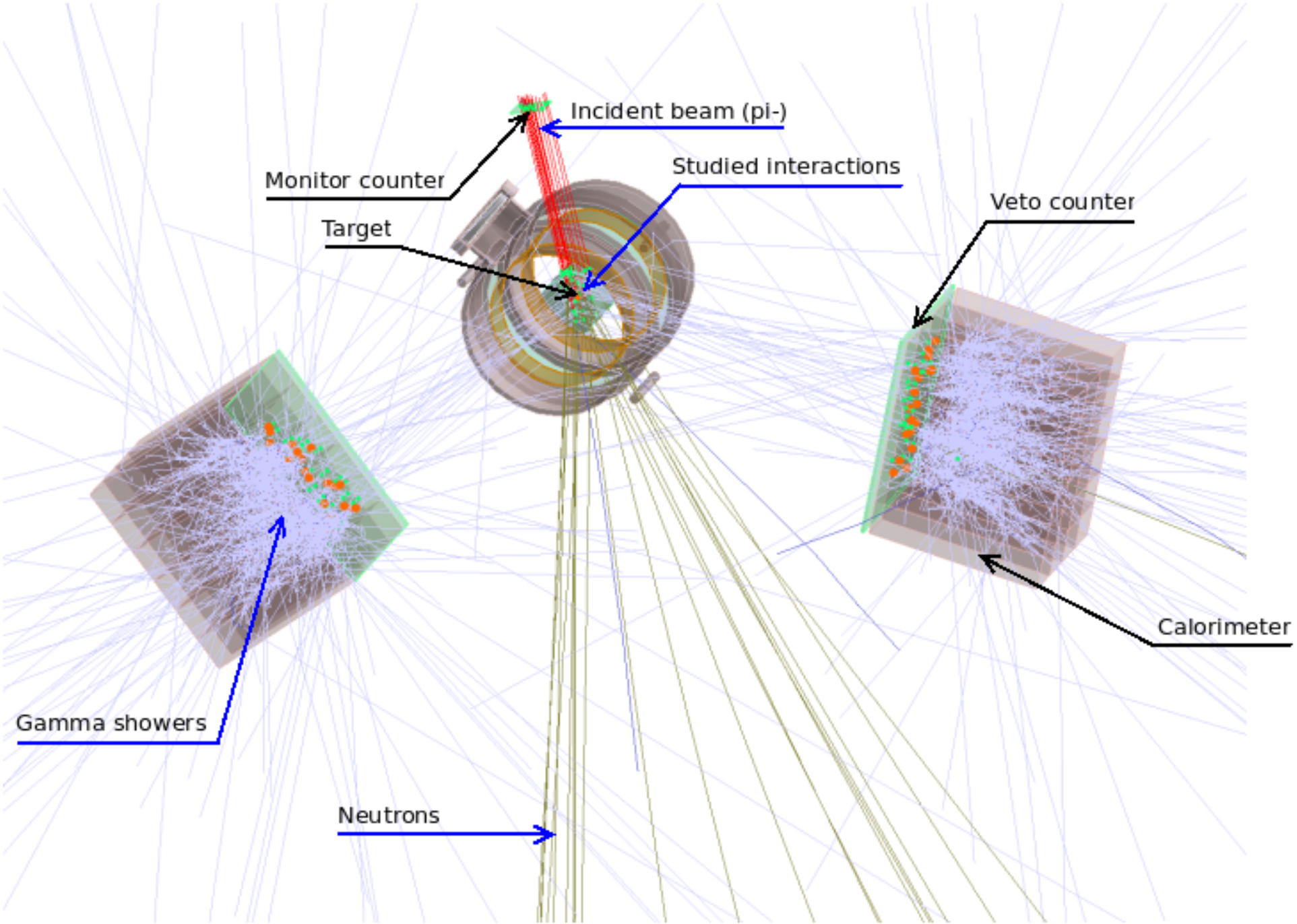
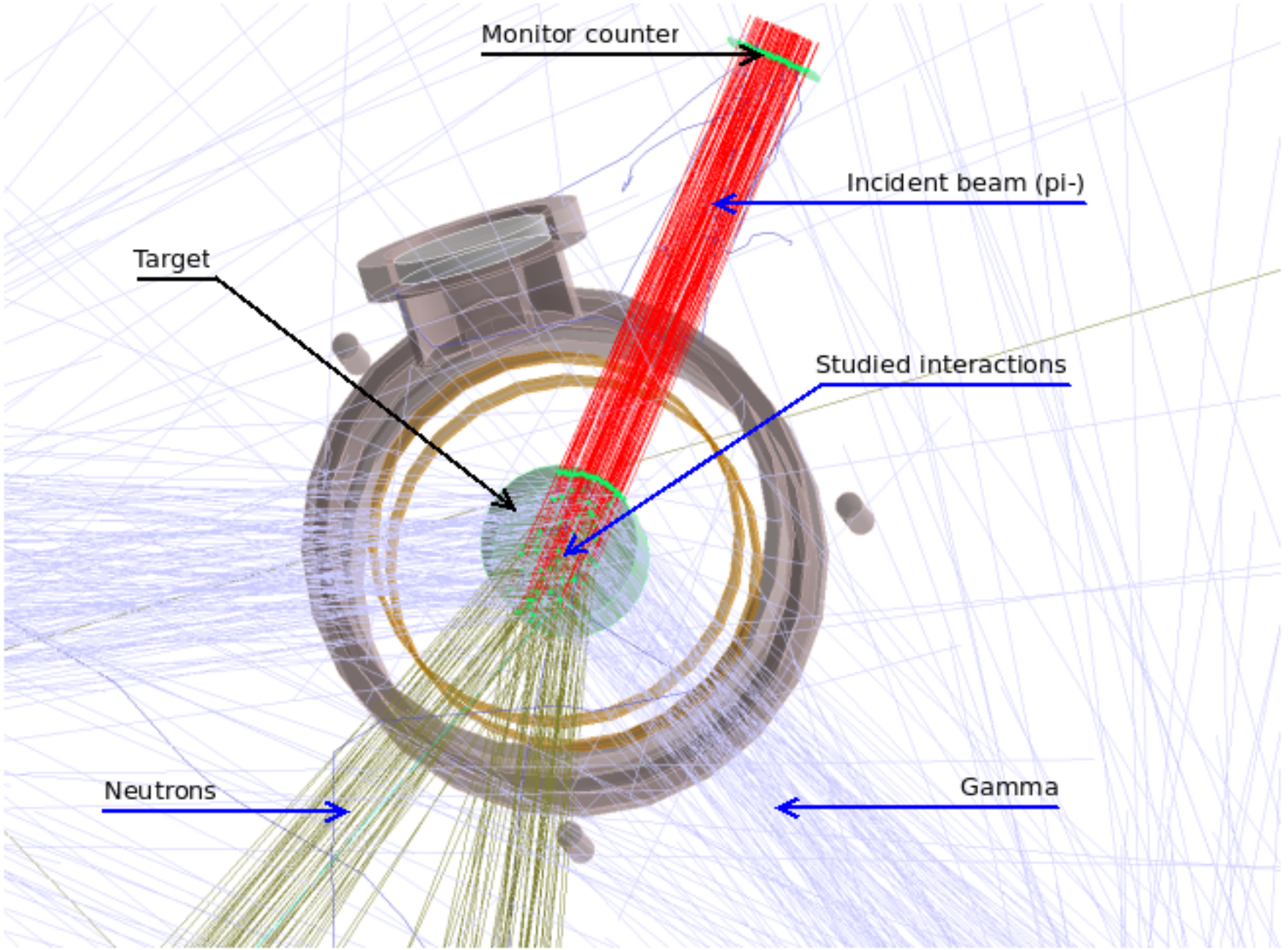
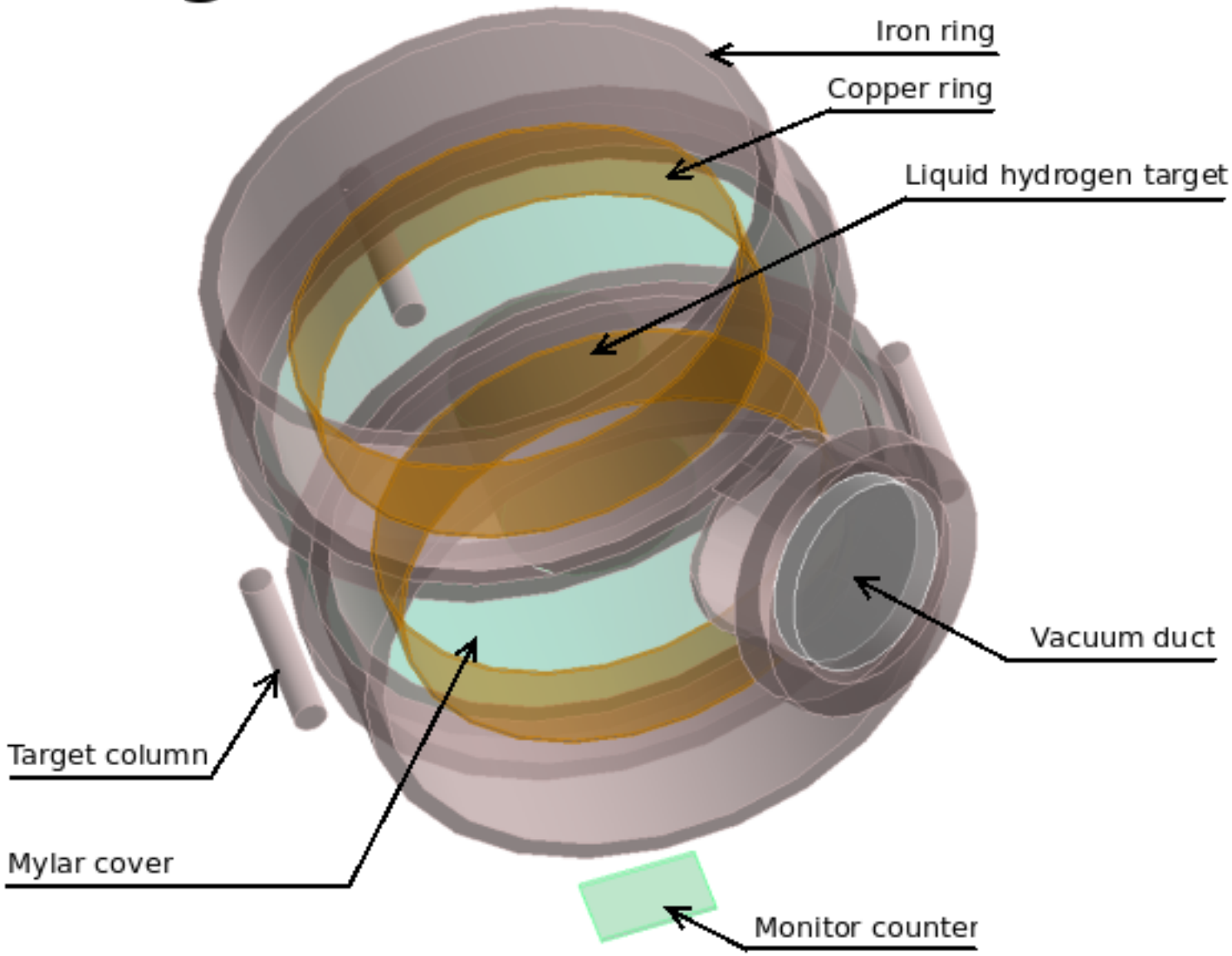
# Cexmc

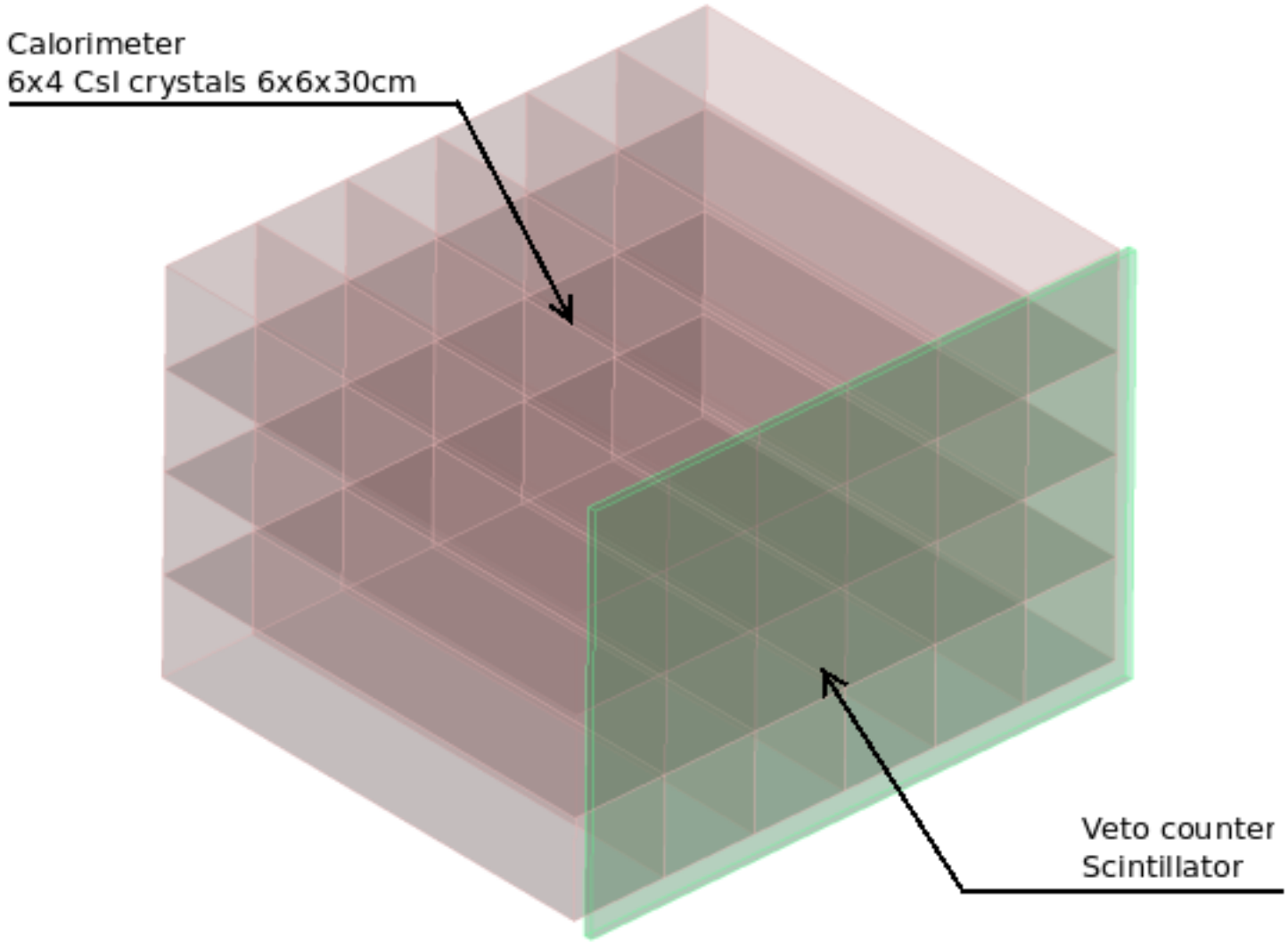
The setup


Incident beam (pi-)
Monitor counter
Studied interactions
Target
Veto counter
Calorimeter
Gamma showers
Neutrons


Monitor counter
Incident beam (pi-)
Target
Studied interactions
Neutrons
Gamma

# The Target


Iron ring
Copper ring
Liquid hydrogen target
Vacuum duct
Target column
Mylar cover
Monitor counter


Calorimeter
6x4 CsI crystals 6x6x30cm
Veto counter
Scintillator

# Explanations and trigger

On the images the incident beam ($\pi^-$) is red, **γ** (decay products of **η** or $\pi^0$ and others) are light blue and **n** (neutrons) are olive. Only events when the setup triggered are shown.

The trigger logic takes information from the monitor counter, veto counters and calorimeters and tests if energy deposit (ED) in the monitor counter is bigger than related monitor threshold (it means that a charged particle — supposedly $\pi^-$, has passed the monitor), ED in each veto counter is smaller than veto counter thresholds (it means that no charged particle has passed the veto counters) and full ED in *inner* 8 crystals of each calorimeter is bigger than calorimeter thresholds (it means that calorimeters has supposedly caught the decay products of output particles, i.e. the 2**γ**).