

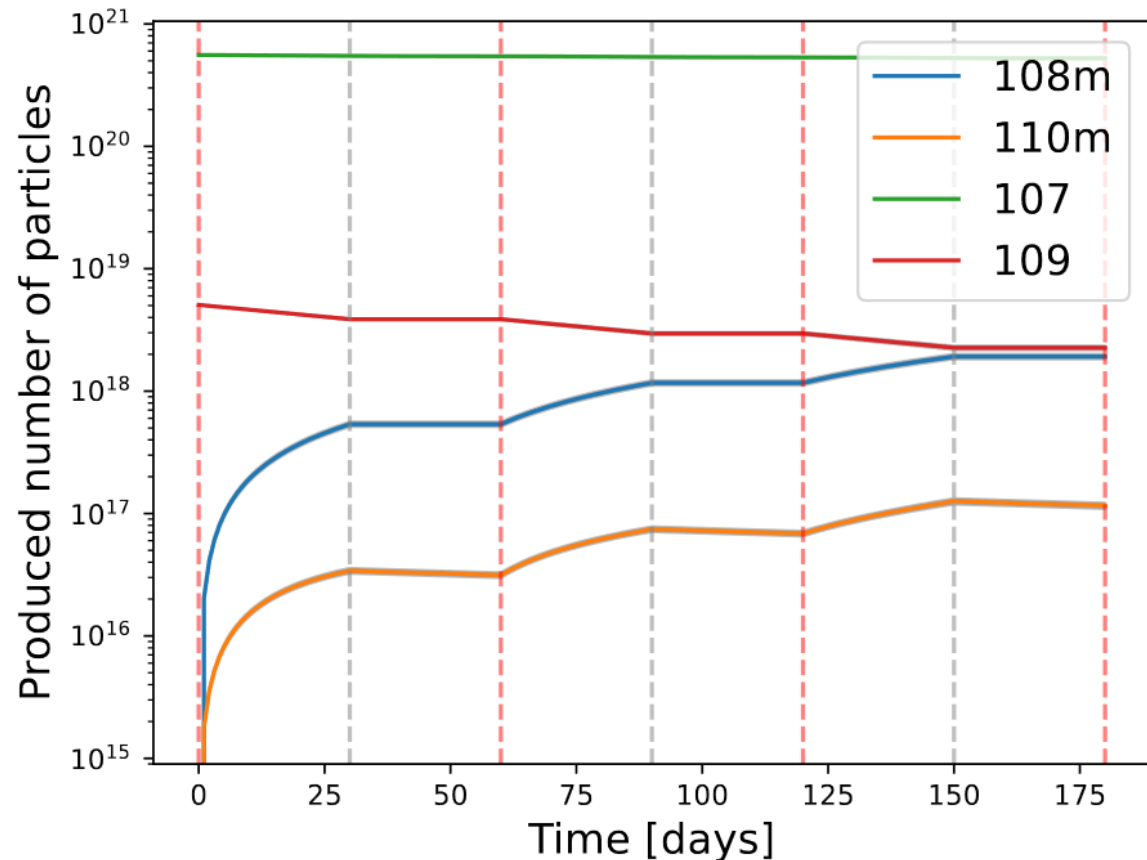
Update muX meeting 07/03

Marie Deseyn

$^{108\text{m}}\text{Ag}$ production



We have a plan to produce $^{108\text{m}}\text{Ag}$!!!



$1.92(10) \times 10^{18} \text{ }^{108\text{m}}\text{Ag}$ particles

ISOLDE

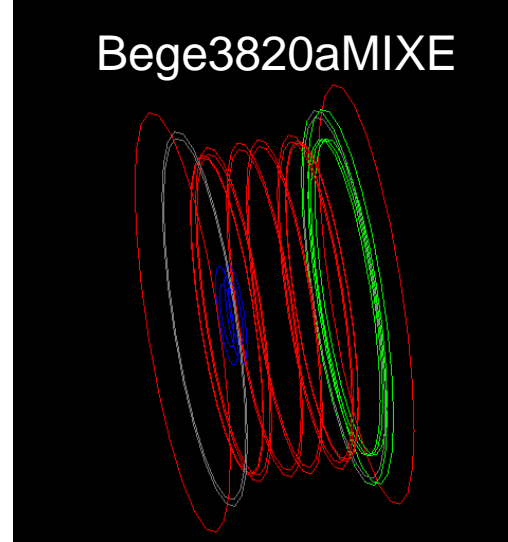
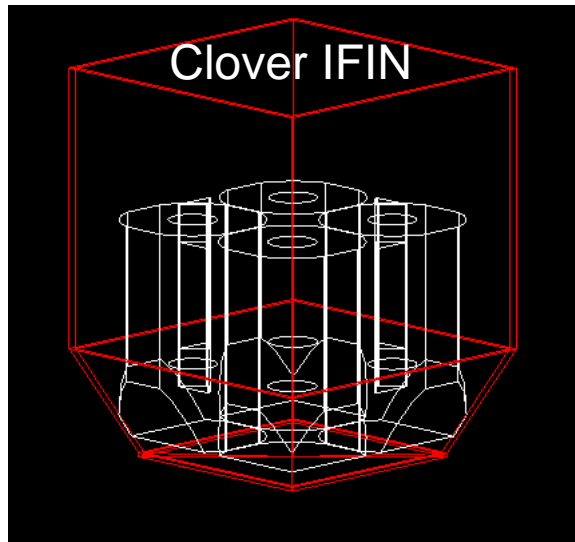
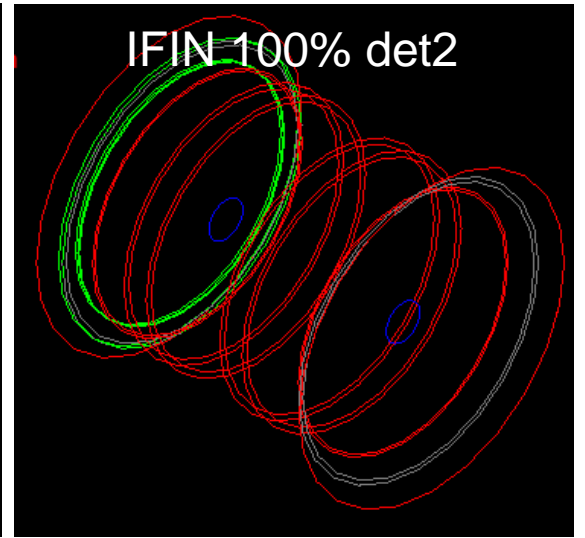
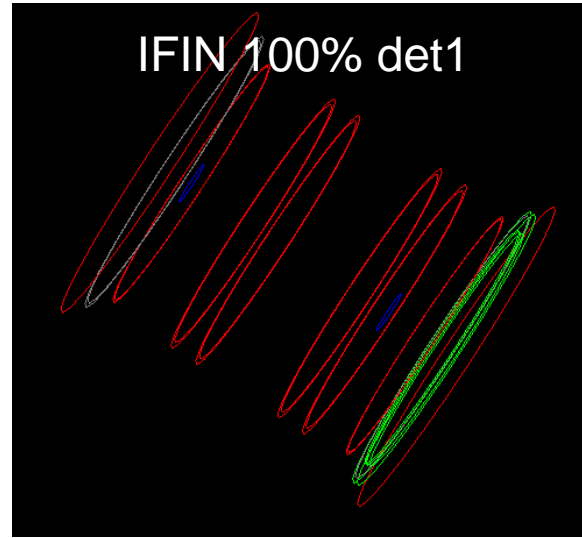
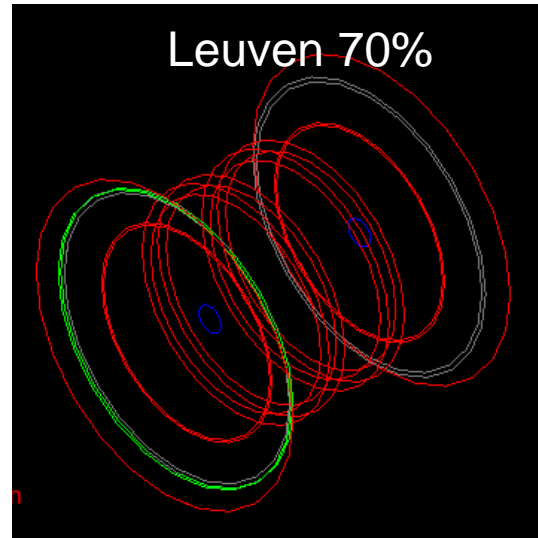
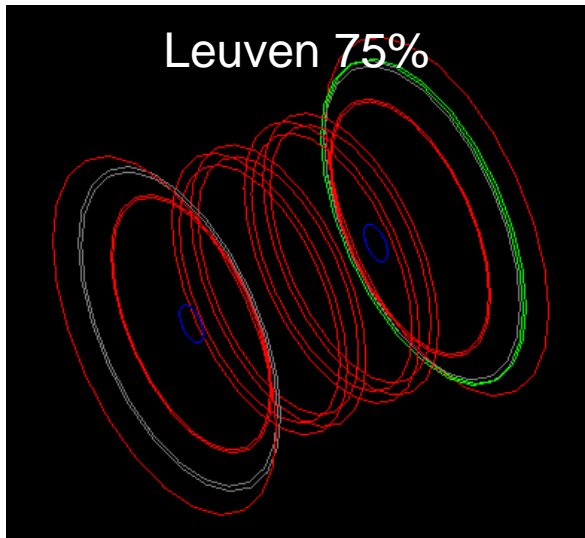
$3.953 \mu\text{g}$

We have a plan to produce $^{108\text{m}}\text{Ag}$!!!

Starting mass	$^{108\text{m}}\text{Ag}$ particles produced after 3 irradiation cycles	$^{108\text{m}}\text{Ag}$ particles implanted on the collection foil (taking into account self-sputtering)	Mass of $^{108\text{m}}\text{Ag}$ implanted [μg]	Time to collect [h]	Purity on the collection foil
100mg	$1.91(9) \times 10^{18}$	$2.11(12) \times 10^{16}$	3.8(2)	24.2(7)	99.8959(15)%
125mg	$2.39(11) \times 10^{18}$	$2.54(12) \times 10^{16}$	4.6(3)	29.1(13)	99.8958(15)%
150mg	$2.88(14) \times 10^{18}$	$2.92(11) \times 10^{16}$	5.2(2)	33.4(13)	99.8962(15)%
175mg	$3.35(16) \times 10^{18}$	$3.25(13) \times 10^{16}$	5.8(3)	37.2(15)	99.8960(15)%
200mg	$3.84(18) \times 10^{18}$	$3.50(8) \times 10^{16}$	6.27(14)	40.0(9)	99.8961(15)%

GEANT4





What is still missing

- 90% Rege coaxial TUM
- 34% Bege TUM
- 50% SEGe coaxial JINR
- GC5019 (“Rasputin”) electrocooled JINR
- Miniball

