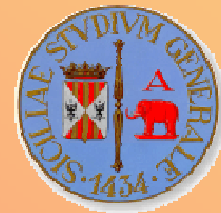


LNS PAC June 17th 2010

Unstable + Test

F.Amorini - G.Cardella - S.Pirrone

For the EXOCHIM collaboration

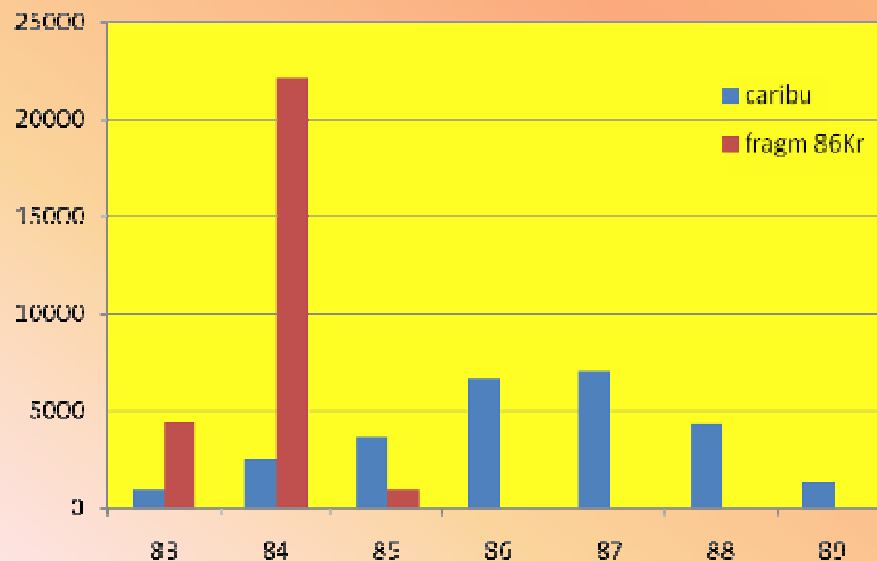


Beam request III

A group study is investigating on the use of a ^{252}Cf source to produce neutron rich beams to be accelerated by the CS

One of the task of this group is to understand if - with fragmentation beams - we can get relatively intense beams near the interesting region in order to begin some work and better characterize our needs

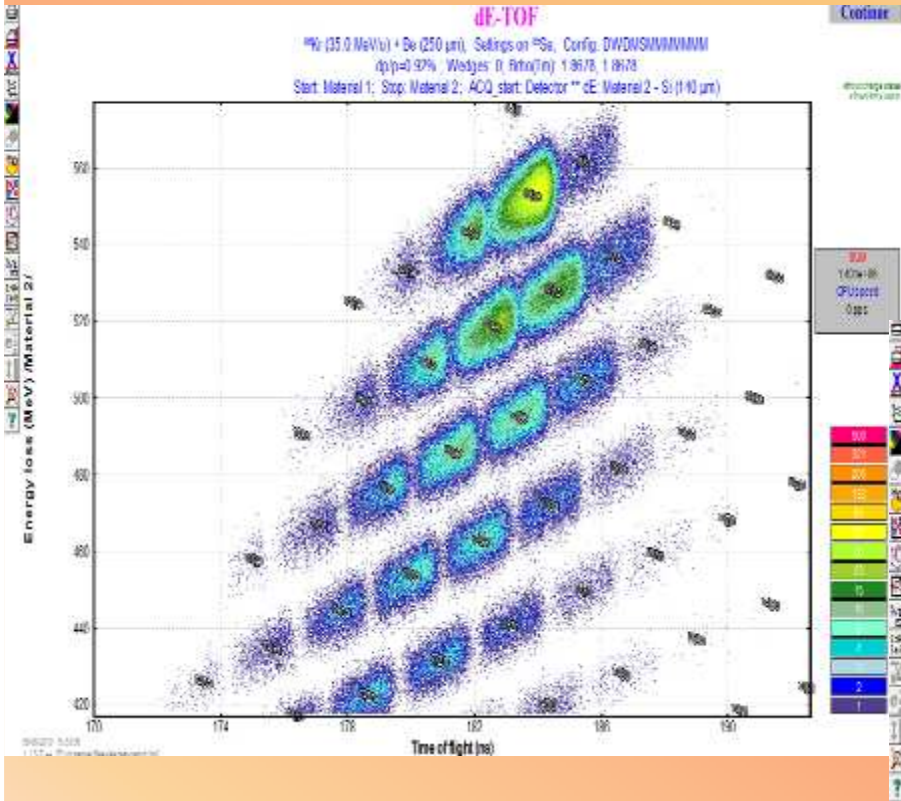
For instance this are the yields predicted for the CARIBU' beams for Se isotopes compared to the yield (before the upgrading for the LNS fragmentation beam) using ^{86}Kr as primary beam



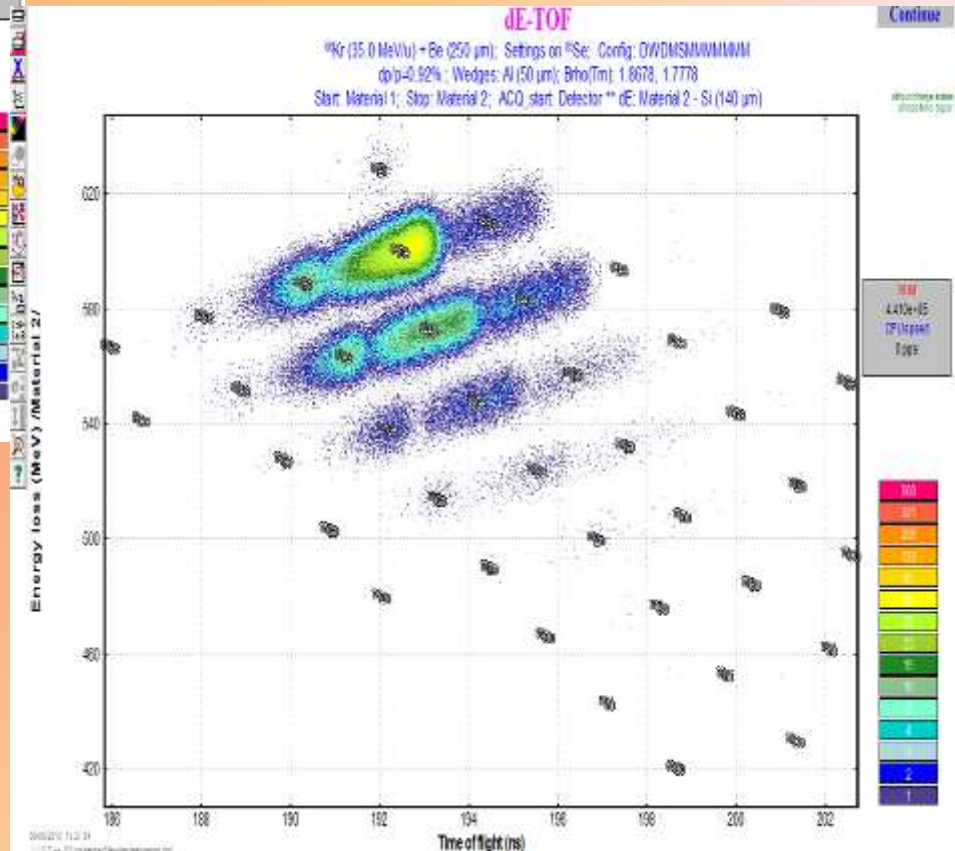
With the upgrading we can gain at least a factor 10

Beam request III

Using Lise it seems rather simple and not too expensive for the intensity to cut with a thin degrader (50 μm Al) most of the unwanted beams – we have to check it



Therefore our first attempt will be to produce neutron rich selenium isotopes and we require 9 BTU ^{86}Kr beam





Projectile $^{86}\text{Kr}^{36+}$
35 MeV/u 0.1 kW

Fragment $^{85}\text{Se}^{34+}$

T Target Be
250 μm cion

St Stripper

Dipole 1 Brho 1.8678 Tm
-8 H +8
-20 V +20

Wedge

Dipole 2 Brho 1.8678 Tm
-10 H +10

Material 1 H8C10O4
2 μm cion

S Drift 1 beam-line
13 m

Material 2 Si
140 μm cion

Material 3

Material 4

Material 5

config: frbnew05rightpac
option: default
version: 8.5.28

dpn 0.92%
scat

FRIB

Projectile Fragmentation

