Then the complementary setup :
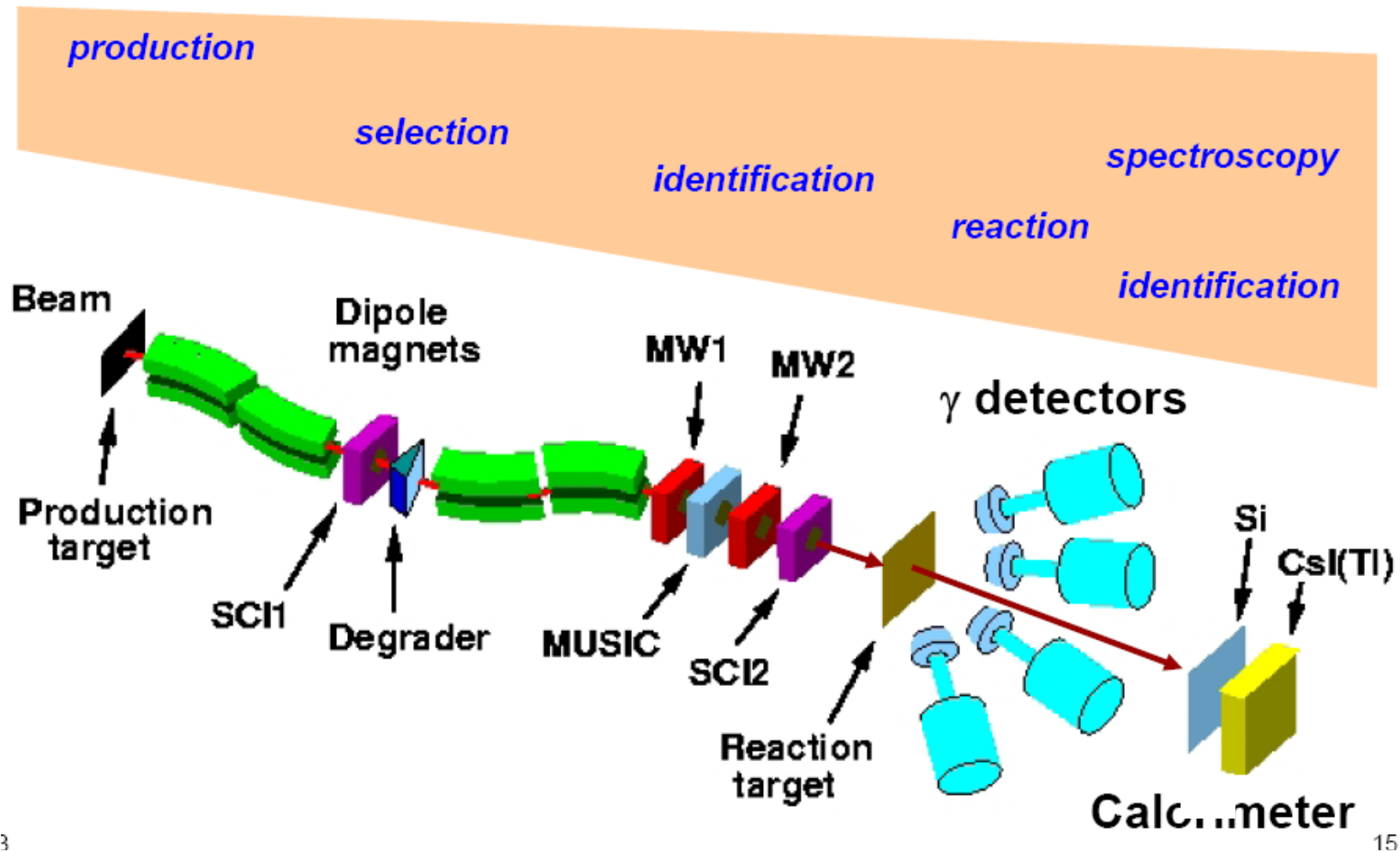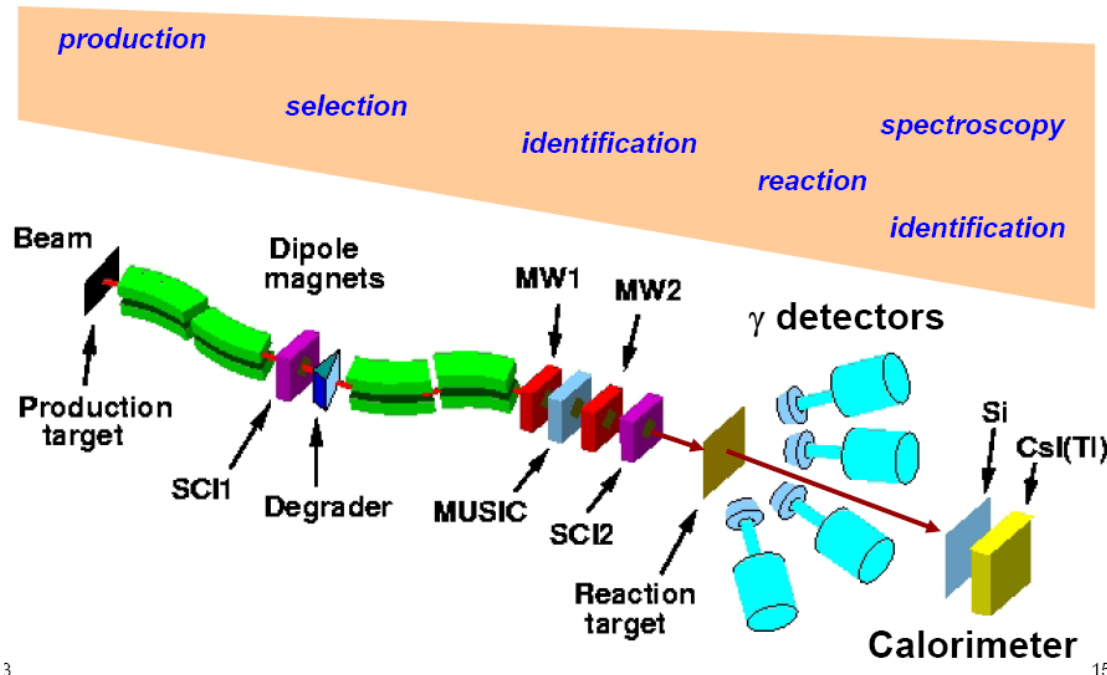
Then the complementary setup :

Two spectrometers :
- FRS (selection/identification)
➔ 4 VME crates

LYCCA ➔ tof-E-DE
➔ 4 VME crates

Trigger logic ➔ 1 VME crate
➔ Contains AGAVA +TRLO

Hector ➔ 1 VME crate

Usual trigger ➔ particle-gamma coincidence + normalization

GSI built acquisition system : Multi Branch System
➔ easy for 10 VME crates running synchronously
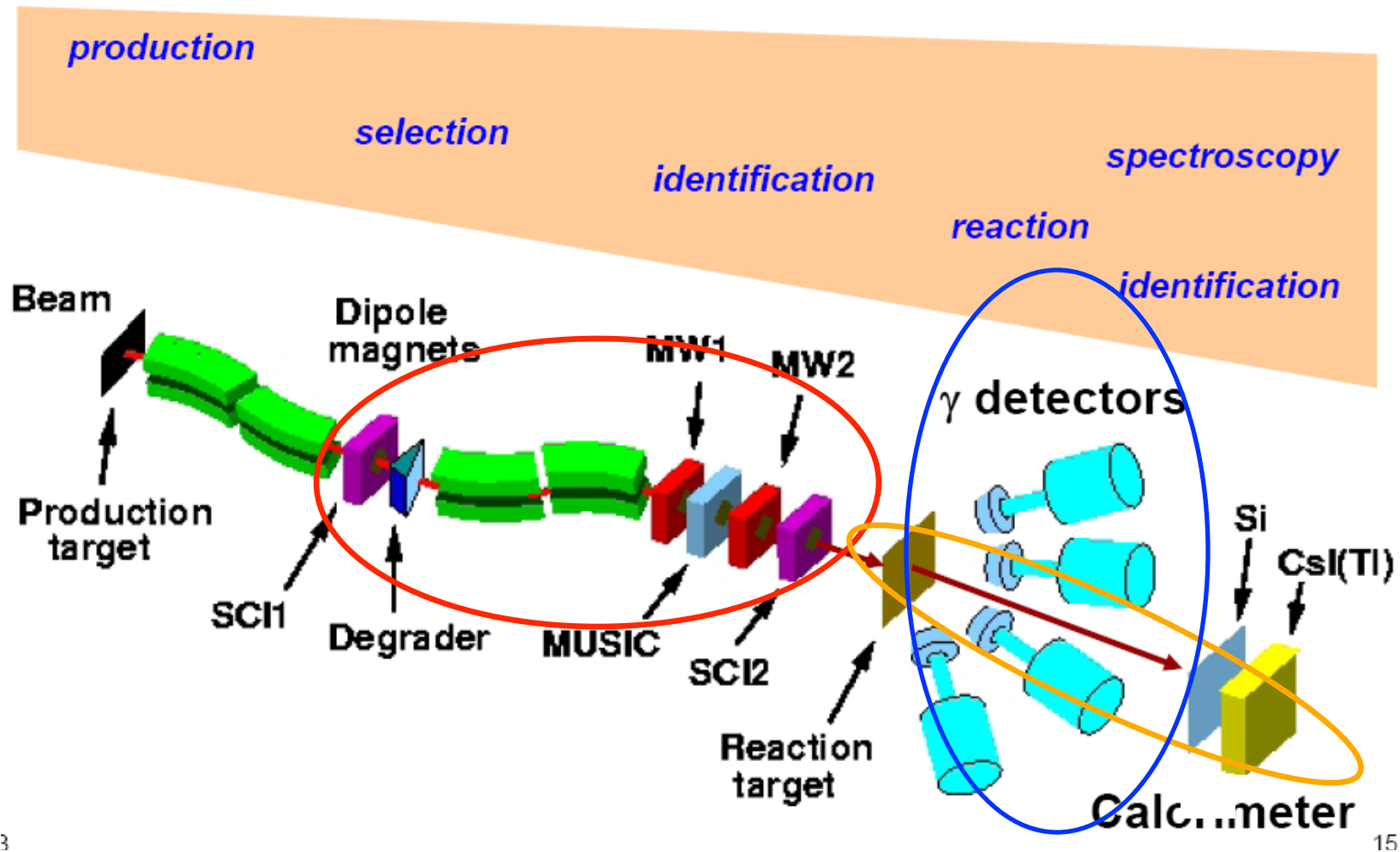
AGATA trigger :

-in AGATA two triggers

1. One for the PREPROCESSING electronic ➔ channel trigger (level one trigger)
2. One for the coincidence in PRESPEC which validates the previous one

The first one is just above the channel noise
The second one is depending on where the physics is expected (100kev to 500 keV threshold)

➔ The OR of all cores of the second one is used as the

A valid event :

Trigger scheme :

MBS gives the validation trigger for AGATA ➜ trigger PRESPEC
! We have an hit pattern to clean the cases of multi coincidences

12/13 : beam on and off

10 : particle reduced (normalisation)
9 :AGATA+LYCCA+FRS
8 :Hector+LYYCA+FRS
7 :AGATA+FRS
6 :Hector+FRS
5 : FRS trigger box (Music or others)
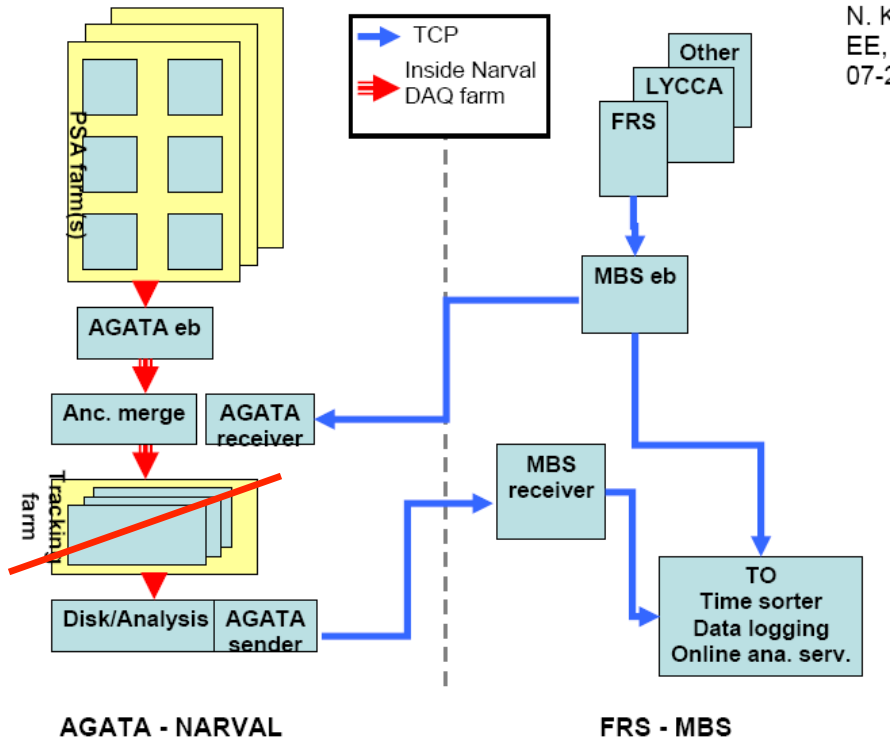4 : Hector cal
3 : AGATA cal
2 : LYCCA calibration
1 : pulser

PRESPEC and AGATA merging

Two parallel data flow

Two options :

→ "MBS ed" send simply unprocessed data

→ "MBS eb" process data and send to the AGATA stream <u>together</u> with the unprocessed data the information needed by AGATA tracking

Trigger coupling : → Like in Legnaro → coincidence done in analogue and sent to AGAVA as request → send always FRS data

System synchronsation :

Without entering too much in detail usually things are redundant :

-reference signals are either sc41 or sc21 (usually both) in TDCs

-pille up tracking in multi-hit TDC for all tracking detectors

-AGATA time can be : -trigger signal in MBS
-time stamp of the PRESPROCESSING electronic in time
with FRS

-some AGATA core signals are put in MBS for energy too (to check synchro)

-scalers, hit pattern and trigger type should match somehow (to assure consistency
of the data)

-Data flow mergers work with GTS time stamp

-For the moment Data is duplicated in the data flow, we will see in the future.

Computers for the week

Windows connexion all logged under x7 account: Use X-win32
Depc0201 ➔ lxg1027 with agatadaq
Depc0202 ➔ lxg1033 with agatadaq
Depc0203 ➔ lxg0144 with prespec
Depc0204 ➔ lxg0145 with prespec
Depc0205 ➔ lxg0146 with x7
Depc0206 ➔ lxg0147 with x7
Depc0207 ➔ lxg0136 with agatagsi
Depc0208 ➔ lxg0137 with agatagsi

Linux computer (used as "terminal x"):
Lxe0209 ➔ lxg0138 with rising
Lxe0210 ➔ lxg1036 with rising
Lxe0211 ➔lxg1034 with ascan01
Lxe0212 ➔ lxg0086 with ascan01
Lxe0213 ➔ lxg1033 with x7
Lxe0214 ➔ lxg1031 with agatagsi
Lxe0215 ➔ lxg1028 with rising

Create a directory in /data.local/ of the computer to connect to