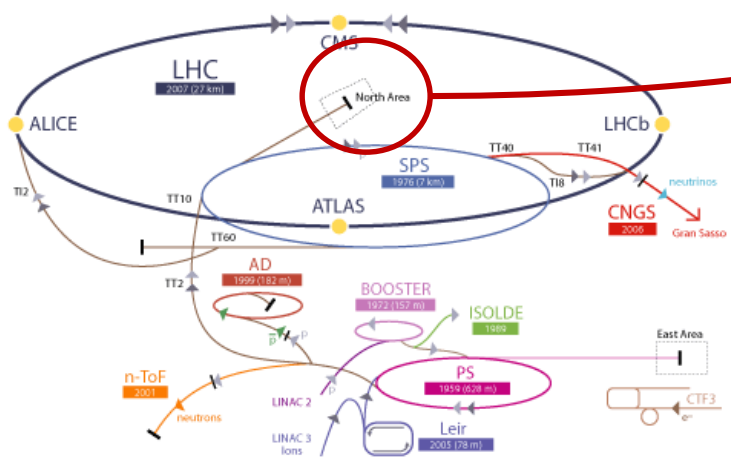


WG7 - Common Facilities

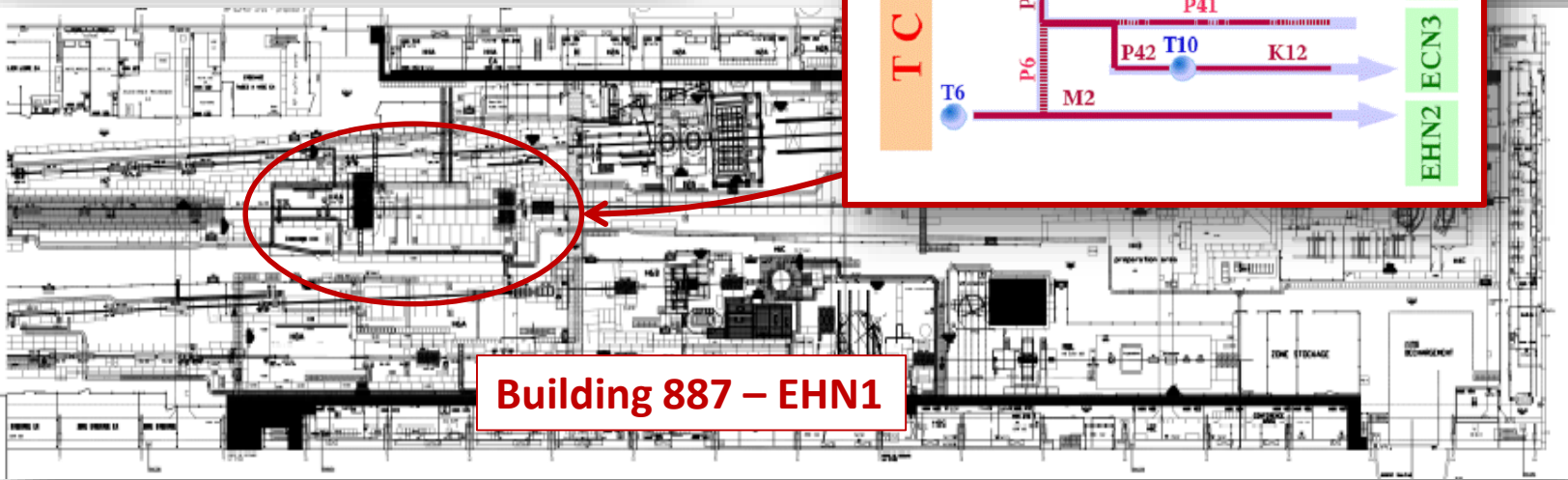
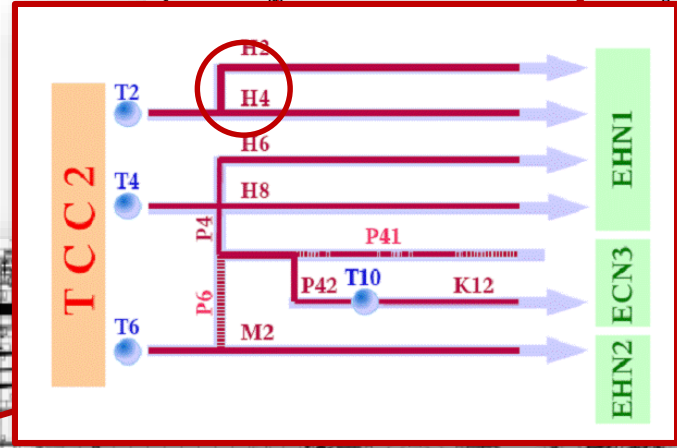
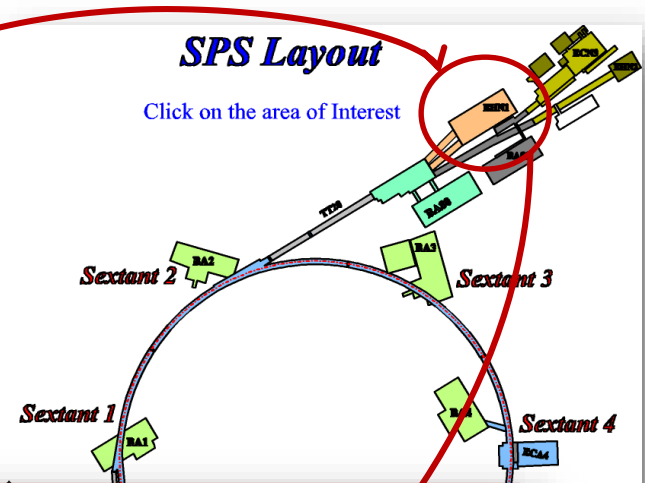
Eraldo Oliveri & Yorgos Tsipolitis

CERN Accelerator Complex



SPS Layout

Click on the area of Interest

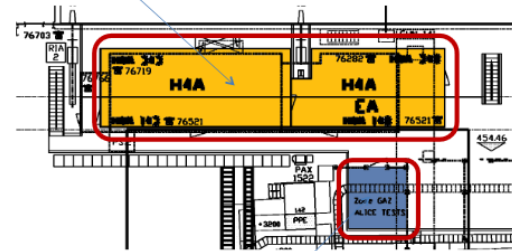


Building 887 – EHN1

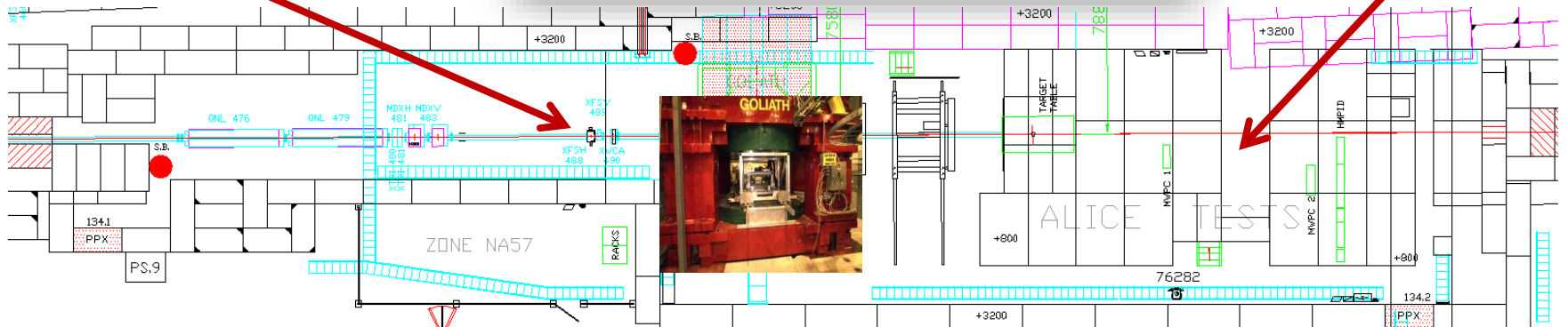
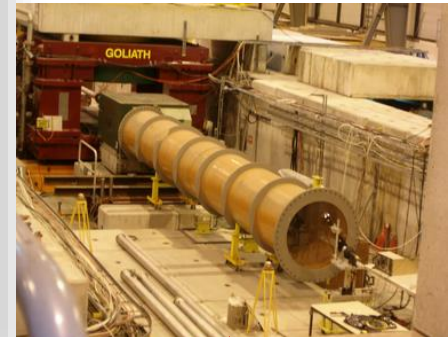


CR & Gas Zone-Common Test Beam Facility

Control/Counting room



Gas Zone:
Distribution Panels to/from experimental area.
Possibility to have flammable gases.



+ GDD/RD51 Laboratory available during test beam (to fix issue with detector/electronics)

Semi permanent installation EHN1-H4 (SPS North Area) – RD51 Support to the collaborators

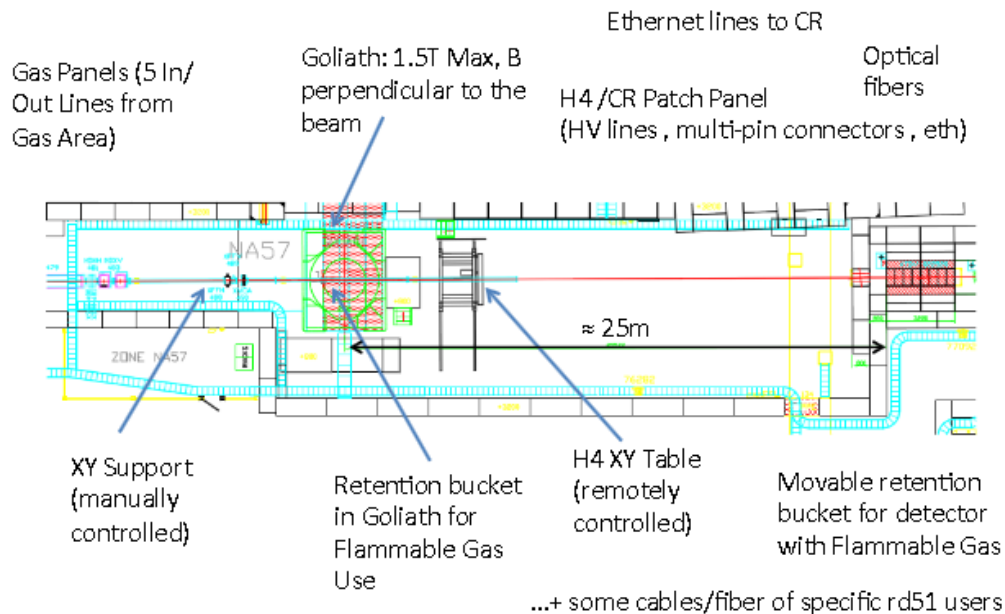
Interface with the SPS coordinator

Internal (beam sharing between groups) and **external** (GIF++ and with any other parallel user) coordination

Typical Shift Scheme

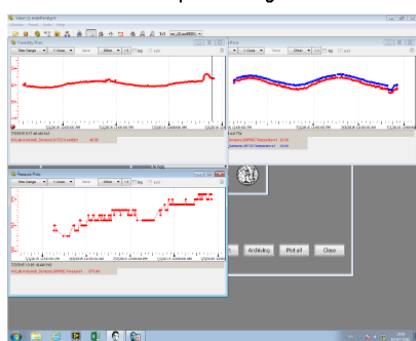
	MAIN	Parasitic1	Parasitic2
Shift1	ALICE TPC	WIS/Aveiro/Coimbra	LNF
Shift2	ATLAS NSW	ALICE TPC	WIS/Aveiro/Coimbra
Shift3	CMS GEM	ATLAS NSW	ALICE TPC
Shift4	LAPP/UA/NCSR/IRFU	CMS GEM	ATLAS NSW
Shift5	LNF	LAPP/UA/NCSR/IRFU	CMS GEM
Shift6	WIS/Aveiro/Coimbra	LNF	LAPP/UA/NCSR/IRFU
Shift7	ALICE TPC	WIS/Aveiro/Coimbra	LNF
...			

Infrastructures (gas, HV, LV, sensors,...)



RD51 DCS (Control and monitoring)

Environmental plots during Test Beam



RD51 Trackers and SRS/APV25/VMM3 DAQ



Mechanical support (Miranda)



Looking into the Future...

- Although the test beam area is available since many years we always feel that we could improve things. For this reason we have prepared a “mini” questionnaire that we will circulate soon to get opinions/ideas/etc.



WG7 - Common Facilities - Future RD51 - FORM

Dear friends,

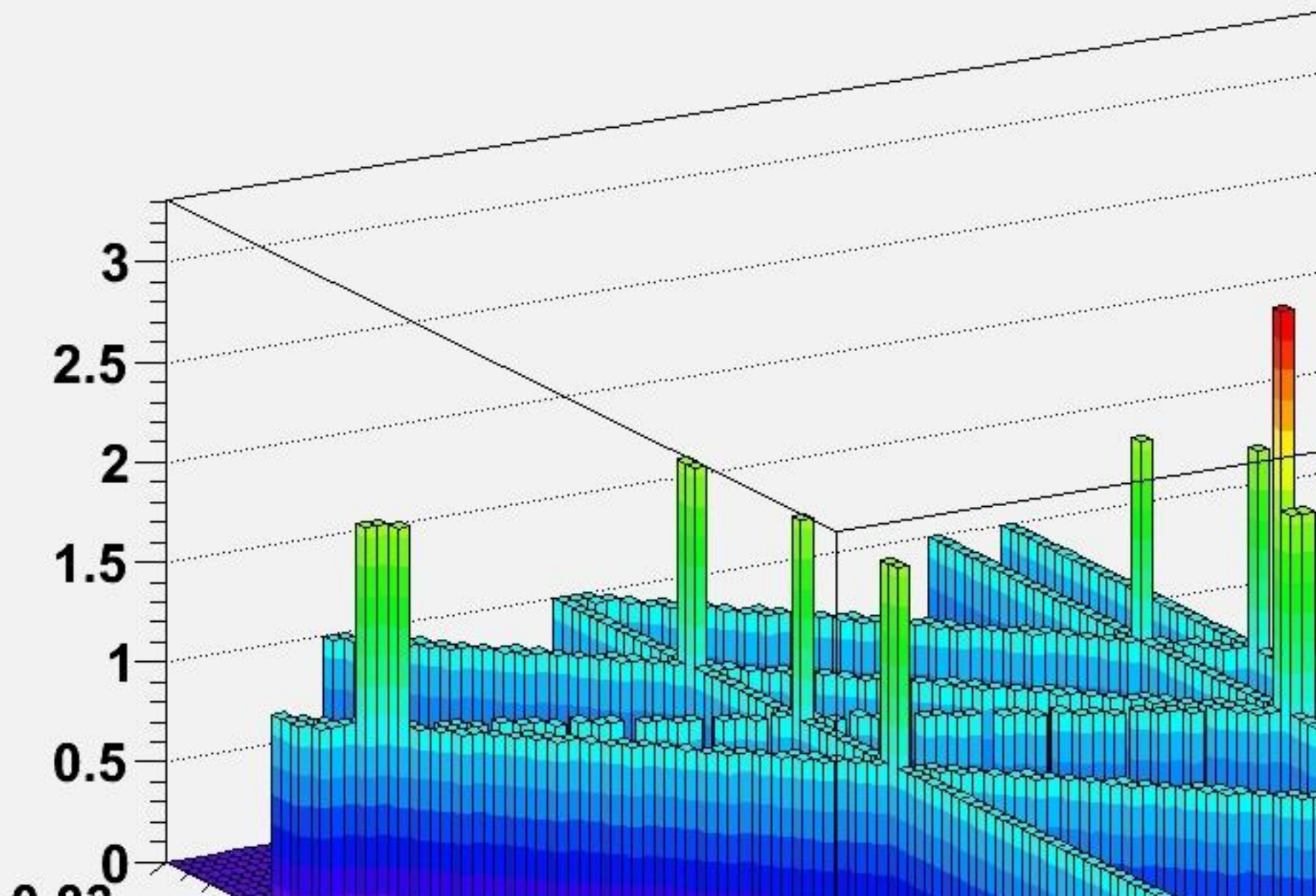
In an attempt to extend and better optimize our test beam campaigns in SPS/NA/H4 we would very much appreciate your opinion. It would be nice if you could spare some of your time to fill the questions below.

Thanks in advance

Eraldo & Yorgos

- Is there something that is missing at the test beam and you think it would be useful?
- From what we have in the test beam is there something that you think it could be better optimized?
- Do you face any difficulties on profiting of the existing facilities? If yes what are these?
- If you want, please add any of the following information: name, mail address and the group you belong to

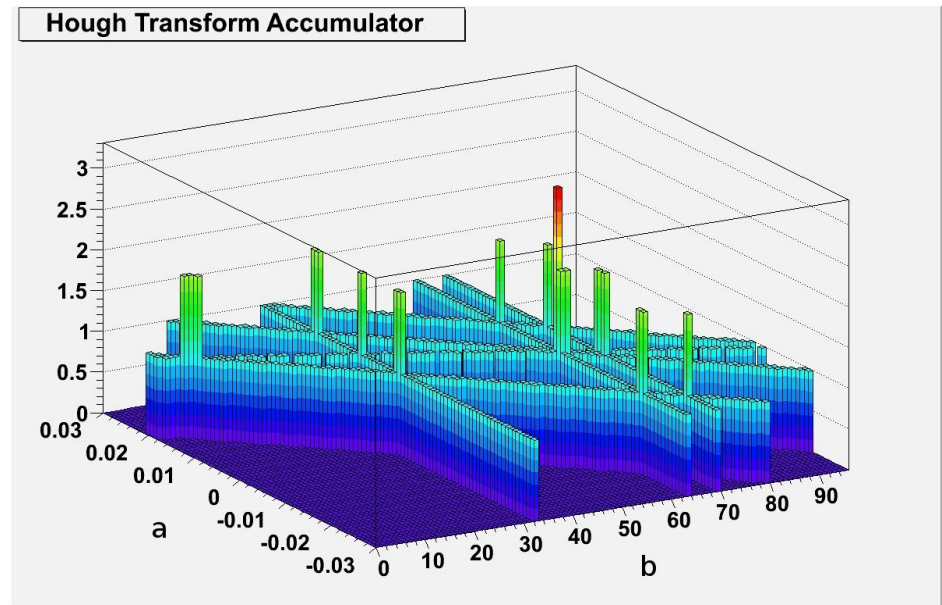
Hough Transform Accumulator



Sharing hw/fw/sw

- During all these years many tools have been developed. Sometimes people have to “re-invent the wheel”. It would be nice if we have a common depository as a starting point. People can get something that “exists” and if they develop something new can put it back for future use by other colleagues.
- We already have a track finder for the RD51 beam telescopes based on Hough transform

There are many tools available that could be useful lets make them available



Test beam outside CERN?

Except the CERN test beam there are also other test beam possibilities (DESY, FERMILAB, PSI ...)

In addition many labs members of RD51 have different irradiation facilities (eg neutron, synchrotron, low energy electrons ...). What about having these facilities known/available to the RD51 members?

Of course we do not expect an installation like SPS/NA but it would be nice if there is access

Supporting Labs ?



Most people know the GDD LAB at CERN. It is the reference point and provides support to everyone participating to the test beam campaigns (and even more). Could we have some kind of support at other labs where we could get the possibility of test beam or irradiation ?

New Directions ?

Some of the hot areas in gaseous detector are:

- Use of environmental friendly gases
- Ageing
- Outgassing
- ...

Is it worth expanding our common facilities to any of these regions?