

BACKGROUNDS

REPORT

Eugenio for
the

SuperB Background team

GREAT MEETING!

- Traced the plan of activities for the next months.
- First contacts with PID people to include the DIRC in the backgrounds analysis.
- Very good and promising new ideas:
 - Python to access Geant4 internals @ runtime
 - geometry sincronization (fast \leftrightarrow full)
 - backgrounds frame superposition (fast sim)

PLANS: TIME LINE

- Goal for the Paris meeting:
produce and analyze a bigger background sample
- Mid of January: preproduction of a small sample to
 - Exercise Bruno (Eugenio, Andrea, Roberto)
 - Exercise the farm and storage in Padova (Roberto)
 - Production cut studies (1 man week / subdetector)

NON PHYSICAL PARAMETERS

- Production cuts: tuning speed vs accuracy
- Physics list: we have to include neutron production

PLANS: TIME LINE 2

- Implementation of the last IR in GDML
(1 - 2 Week: who?)
- Digitization infrastructure (Andrea)
- IFR Digitization (Ferrara: who?)
- Beam gas generator (Manuela)

Antisolenoid →

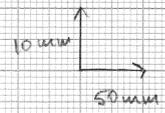
Cryostat →

↗ *QF1*

QD0L

↖ *LER* *QD0*

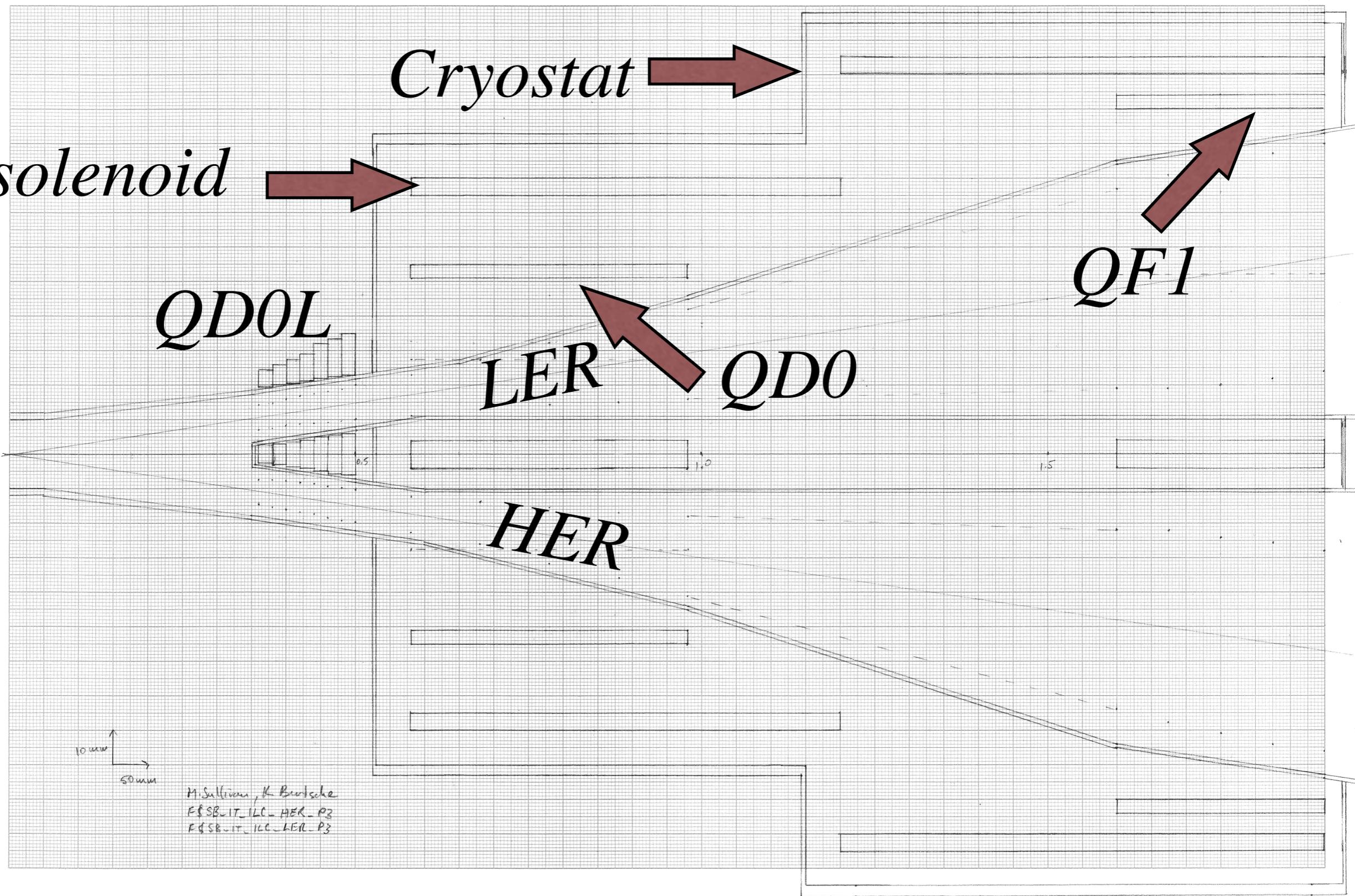
HER



M. Sullivan, K. Butsche
F&SB-IT-ICC-HER-P3
F&SB-IT-ICC-LER-P3

47 1510

KE 10 X 10 TO THE CENTIMETER #25 X 38 CM.
KEUFFEL & ESSER CO. MADE IN U.S.A.



END OF JANUARY

- Radiative Bhabha (BBREM)
- Pairs production (Diag36)
- Touschek (Manuela's tool)
- Beam gas (Manuela's tool extended)
- Neutron scattering and thermalization

CODE DEVELOPMENT

- First attempt of Monte Carlo truth (Andrea + Eugenio)
- Digitization infrastructure (Andrea)
- Geantino Radiography (Eugenio)
- Python Interface report in February ready in April (hopefully) Andrea

CPU & DISK

- Padova Farm (Roberto Stroili)
- Xrootd server to store and distribute the data

MAN POWER ISSUES

- IR GDML-ization?
- Book keeping?
- Job submission and management?
- Digitization?

CONCLUSIONS

- Very fruitful and enjoying meeting
- Lot of home-work to do
- Join the venture!