



JYFL - ACCLAB

Accelerator Laboratory, Department of Physics,
University of Jyväskylä, Finland



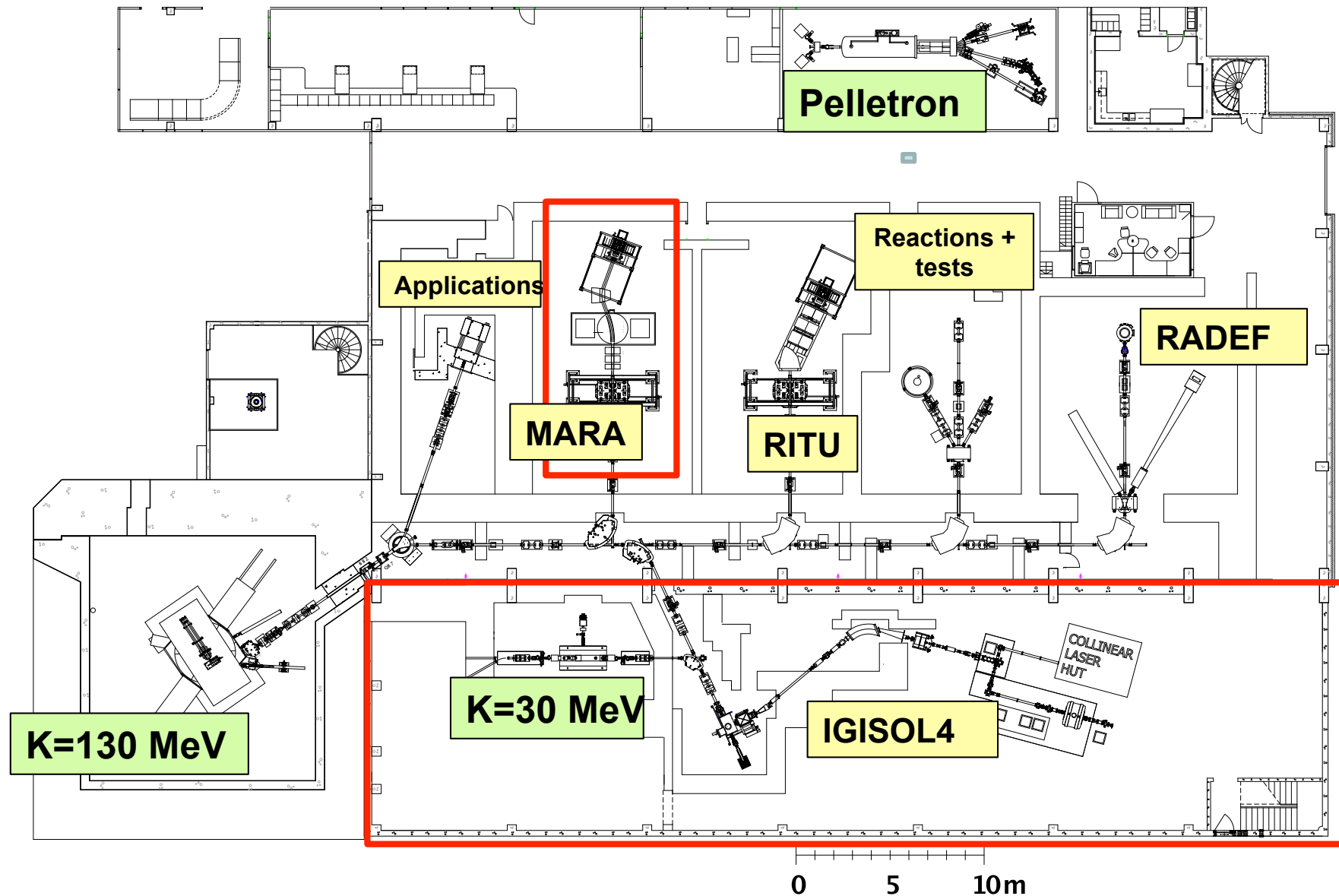
ENSAR-FCG Meeting
Corsica 27 September 2011

JYFL Accelerator Laboratory

- Part of the Department of Physics of JyU
- International infrastructure in Finland
- Center of Excellence status
- Accredited test facility of ESA

upgrade going on

*Upgrade of the JYFL Accelerator Laboratory
New 30 MeV cyclotron - new IGISOL4 - new MARA Recoil separator*

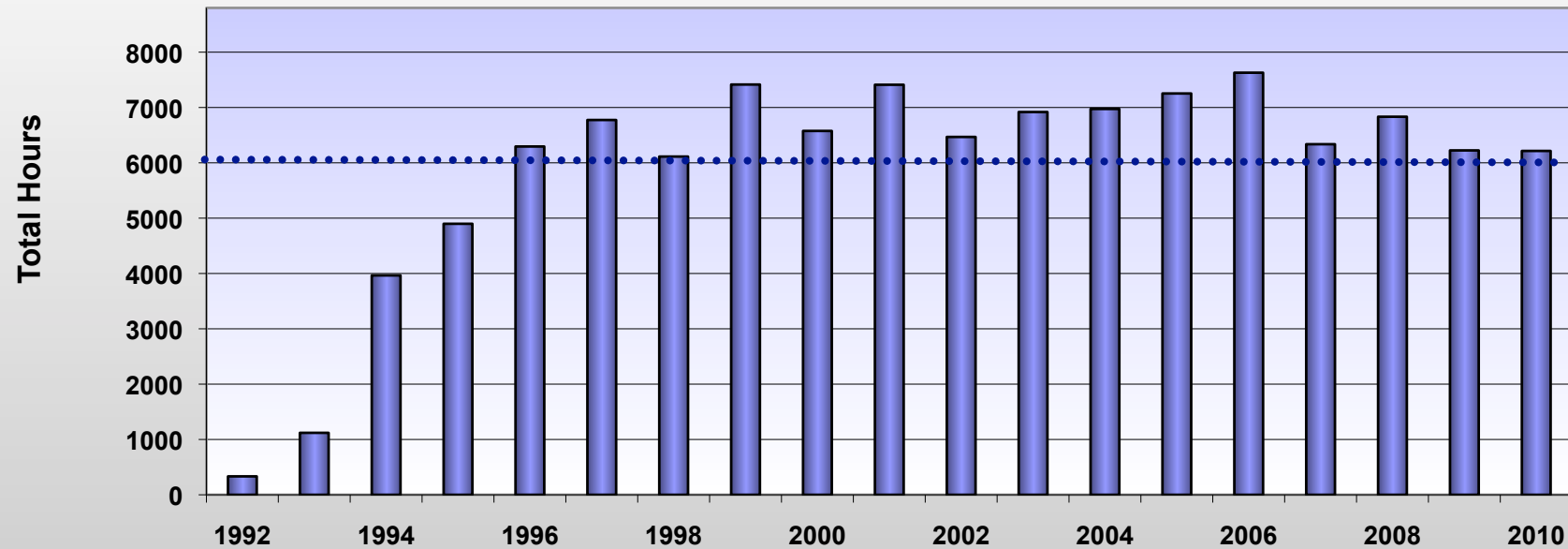


→ More beam time for difficult experiments and testing

K=130 cyclotron operation



Operation of the Jyväskylä Cyclotron



- Includes 1100 hours/year for commercial services
- 75% on target

JYFL-PAC

- 6 international scientists.
- 3 years period (1,5 y for the chairman)
- invited based on their expertise of sub-disciplines within the JYFL -ACCLAB.

at the moment:

Lorenzo Corradi, INFN-LNL, Legnaro, Italy (reactions, chair)

Michael Block, GSI, Germany (lasers and traps)

Guenther Dollinger, Univ. der Bundeswehr Muenchen, Germany (applications)

Thomas Duguet, DSM/IRFU/SPhN, France (theory)

Sean Freeman, University of Manchester, UK (spectroscopy)

Mark Huyse, Katholieke Universiteit Leuven, Belgium. (exotic decays)

Representatives of sub-disciplines are present in the PAC meetings

JYFL-PAC Procedures

- Two calls (15 March and 15 September) for proposals and PAC meetings a year.
- No presentations
- The criteria used in judging a proposal are:
the importance of the physics topic, the feasibility
and the suitability for the JYFL facility.
- Proposals are ranked according to the average mark
they receive from the PAC (max 3, in 0,5 point steps).
- Going from the highest to lowest ranked proposals the beam
time is added until a total time of 100 to 150 days is reached,
thus setting a cut-off mark for the approved proposals.

2001-2010

- ave 39 proposals with 334 days of req beam time / year
- ave 222 days awarded by the PAC (two meetings) / year
- 45 % spectroscopy of proton-rich and SHE nuclei (RITU-JUROGAM)
30 % ground-state properties (IGISOL, traps, lasers)
10 % nuclear reactions
15 % applications (not commercial services)
- backlog 220 days (300 days in 2011 due to the IGISOL reconstruction)

Equipment from other laboratories

- EUROBALL Clover and Phase 1 detectors
- BELEN neutron detector (Madrid-Valencia)
- TAGS-detector (St. Petersburg)
- DSSD cube and DAQ (Madrid-Aarhus-Göteborg)
- Si-Ball (ISOLDE)
- LANCER neutron detectors from Rosendorf Germany
- DEMON detectors (Strasbourg/Brussels/Dubna)

K=30 cyclotron commissioning in 2012

→ more beam time for experiments and applications



Welcome to Jyväskylä

