

JYFL-ACCLAB

Accelerator Laboratory, Department of Physics

University of Jyväskylä , Finland



Sean J Freeman, The University of Manchester, UK
Chair of Programme Advisory Committee

Nuclear and Accelerator Based Physics

JYVÄSKYLÄ



UNIVERSITY OF JYVÄSKYLÄ
FINLAND

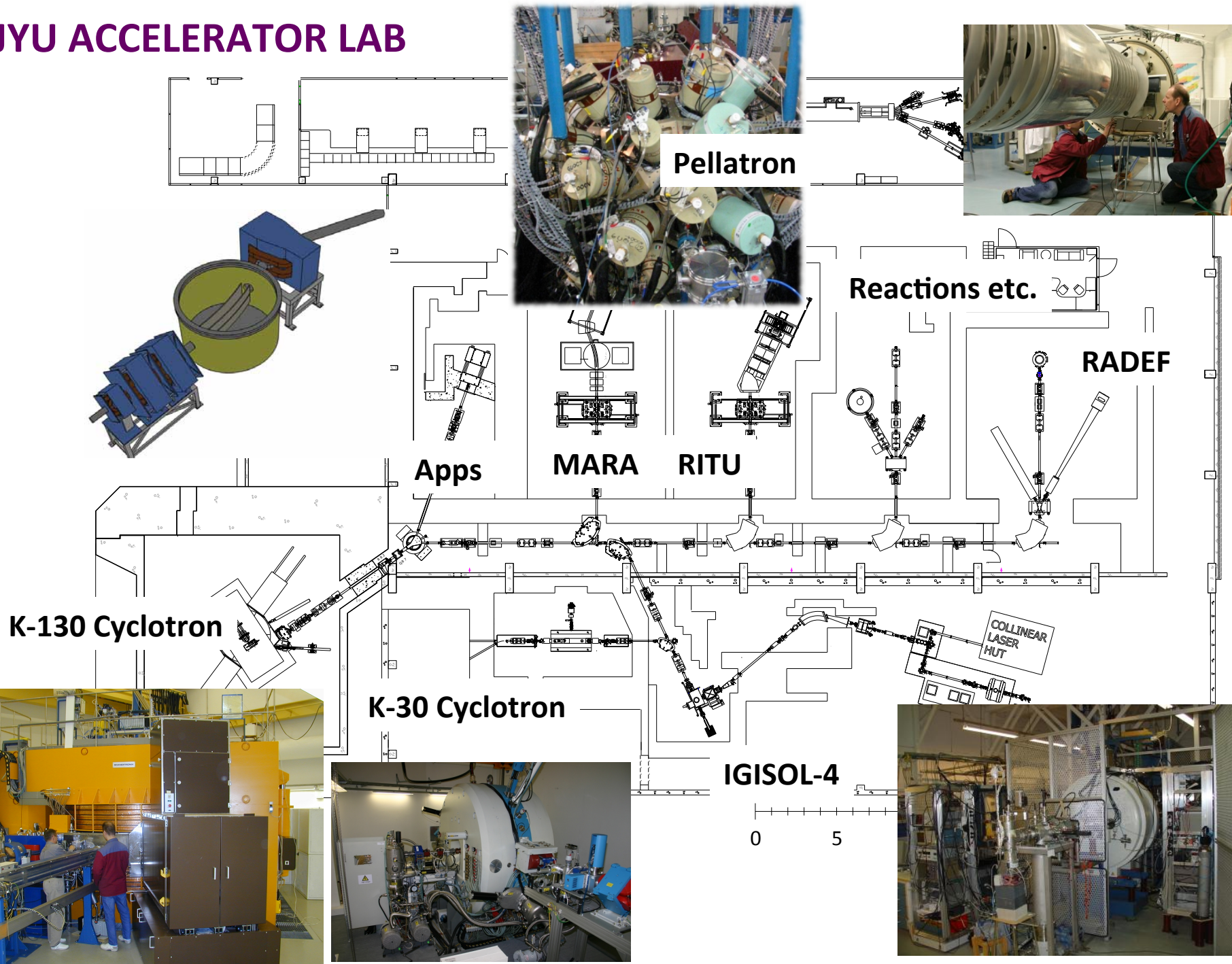


CENTRES OF
EXCELLENCE

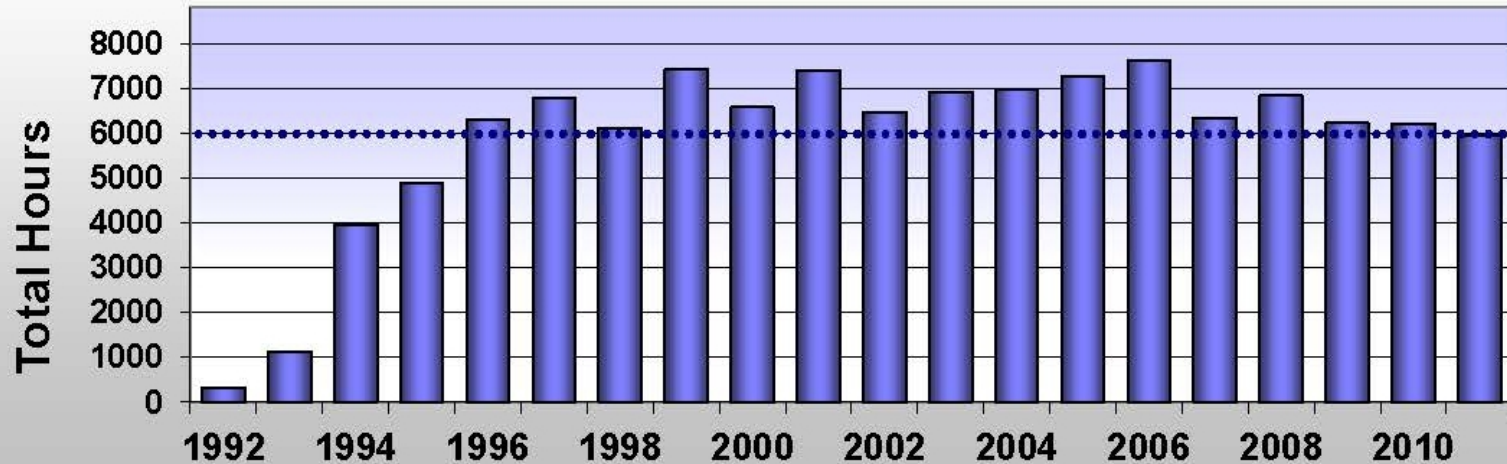


- Part of the Physics Department.
- A Finnish “Centre of Excellence” for many years, recently renewed through to 2017.
- ESA accredited test facility.
- Important piece of international infrastructure in Finland.

JYU ACCELERATOR LAB



Operation of the Jyväskylä Cyclotron



- Operation of the K130 Cyclotron above 6000 hours is routine.
- Includes ~1000 hours of commercial use.
- K30 Cyclotron in parallel use for experiments from Summer 2012.
- Hours for 2011 are still close to 6000, despite IGISOL down time.

JYFL-PAC Membership

- Sean Freeman The University of Manchester UK
- Mikael Block, GSI Germany
- Thomas Duget DSM/IRFU/SPhN France
- Thomas Nilsson Chalmers University of Technology Sweden
- Wolfram Korten DSM/IRFU/SPhN France
- Marek Pfützner University of Walsaw Poland

Local group leaders in attendance at PAC meeting.

Membership for 3 years, chair for 1.5 years.

Half of PAC changed at any one time.

Invited on basis of expertise in JYFL science areas.

JYFL-PAC Procedures

- Two calls per year with deadlines 15th March and 15th September.
- No presentations, but contact with PI by email/phone, if needed.
- Judged on: scientific excellence after verifying the feasibility and suitability of the proposal to JYFL facilities.
- Each PAC members scores each proposal: 3=MUST, 2=SHOULD, 1=COULD, 0=DON'T ... ½ marks allowed.
- List of proposals ranked by average score considered carefully at end of meeting to determine appropriate cut off.

JYFL-PAC Statistics Sept 2010 Onwards

- Average of 35 proposals per year asking for total of 286 days.
- Historical averages of 38 proposals asking for 318 days.
- Success rate of 67%, not a fixed proportion.
- Historically, 72%.
- Requests distributed:
 - 26% Ground-state properties (IGISOL, Traps, Lasers)
 - 12% Nuclear Reactions
 - 42% Spectroscopy (In-beam, decay ...)
 - 19% Applications (not including commercial services)
- Lower numbers recently due to the IGISOL reconstruction and associated larger than normal backlogs.

Backlogs

- Average backlog of 220 days.
- Take in context of the hours of beam supplied.
- Normal two-year time out in operation; extended for IGISOL proposals delayed by reconstruction.
- Large backlogs currently (267 days K-130 and 86 days for K-30), but lower demand recently and expectation that recover to normal levels quickly once IGISOL running recommences.

Equipment from other labs

Equipment used, but not specifically built for operation at JYFL:

- EUROBALL Ge detectors: 30 Clovers 18 Phase I plus shields (GAMMAPOOL).
- BELEN neutron detector (Madrid-Valencia).
- TAGS (St. Petersburg).
- DSSD Cube and DAQ (Madrid-Aarhus-Göteborg).
- Silicon ball (ISOLDE).
- LANCER neutron detectors (Rosendorf)
- DEMON neutron detectors (Strasbourg/Brussels/Dubna).

