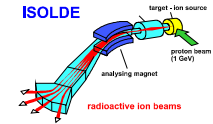


Technical report for ISOLDE

Mats Lindroos

Mats Lindroos

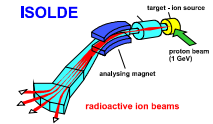


Outline

- Status of ISOLDE front-ends
 - ISOLDE extension
 - Class A lab
 - Hall extension
 - REX integration
 - REX in the AB department
 - Rex and ISOLDE target R&D
- ECR source and high-charge state beam line
 - Shutdown work

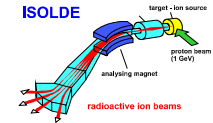


ISOLDE front ends



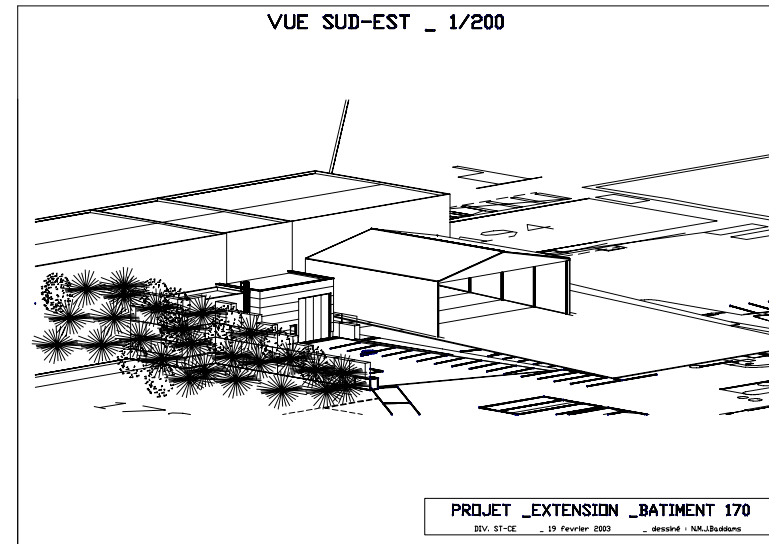
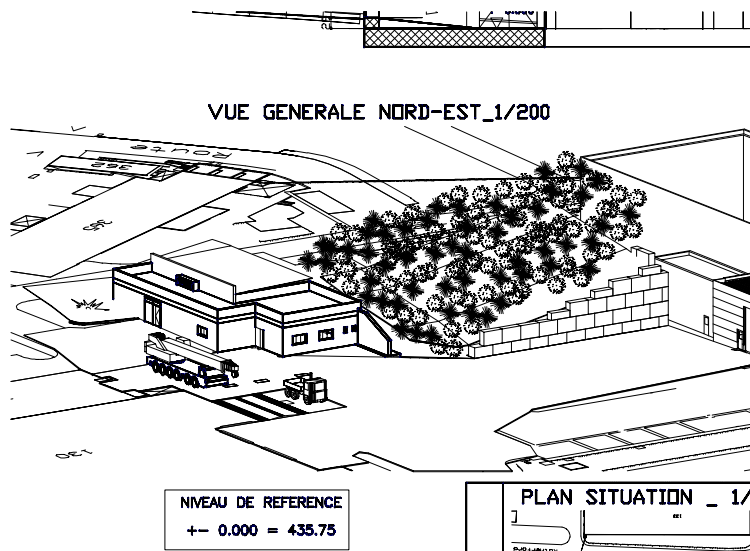
- Normal maintenance of HRS front-end
 - Operational for run
- HV failure of GPS front-end in the beginning of the shutdown
 - New insulator to be delivered
 - Operational for run
- New spare front-end
 - New generation
 - Ready for summer 2004



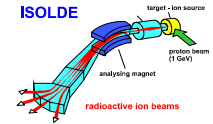


Building extensions at ISOLDE

- Radioactive laboratory of class A at ISOLDE

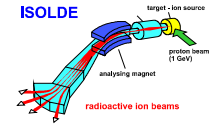


- 25 meter extension of experimental hall for Solid state physics lab, REX energy upgrades and REX experiments



ISOLDE extensions

- Tendering and detailed planning complete for Class A laboratory
 - Start of construction work in the coming week
- Hall extension
 - Tendering completed
 - Detailed planning delayed to avoid collision with work for Class A lab
 - Start in end of March 2004
 - Completed for spring 2005

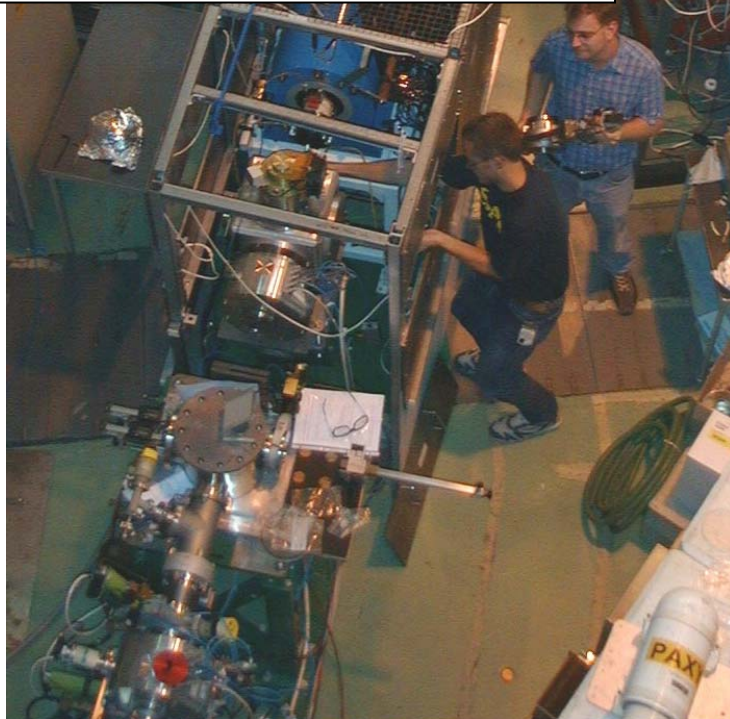
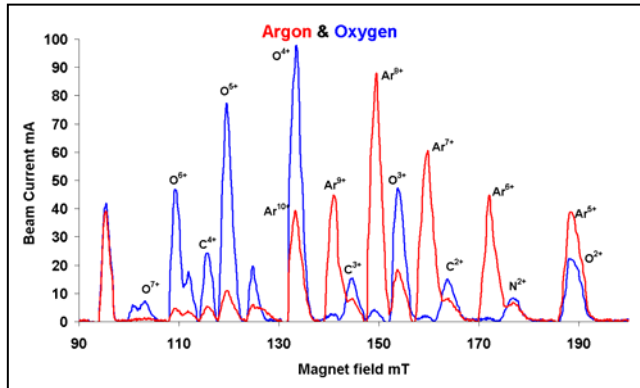
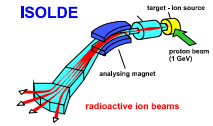


REX integration

- Four new staff has been hired in AB department for REX
- Regular meetings for REX integration on Wednesdays 16:00
 - <http://isolde-consolidation.web.cern.ch/isolde-consolidation/REX-integration/REX-integration.htm>
- Integration more difficult and complex than expected
 - Focus at CERN on the LHC project
- Shutdown work in progress
- Priorities for R&D for REX and targets&ion sources to be discussed in ISOLDE upgrade group
 - Many high priority items and small resources
 - Additional contributions in manpower most welcome



ECR charge breeder operational at ISOLDE

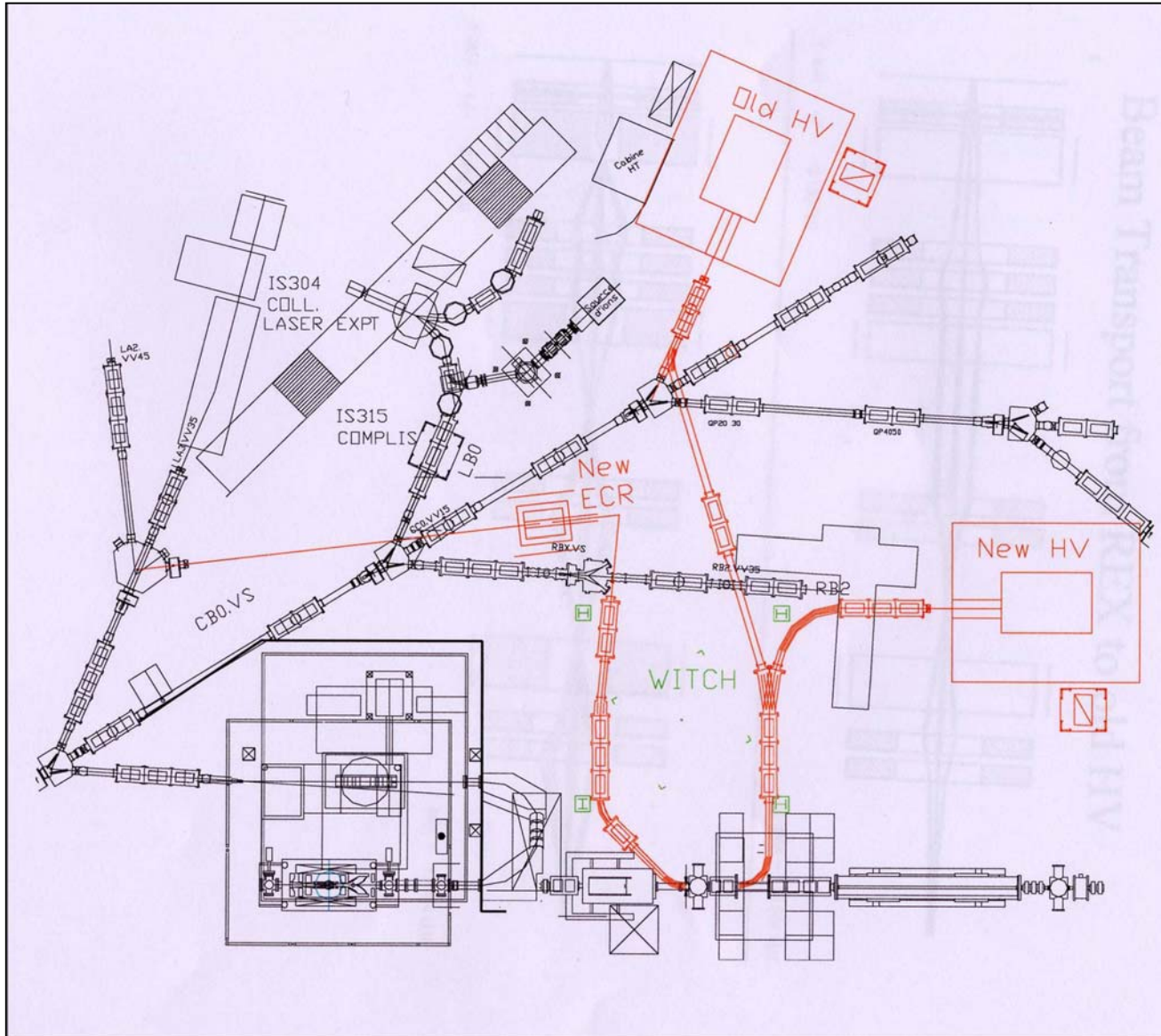
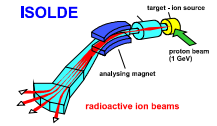


- 5th EU framework charge breeding RTD: Comparison of EBIS and ECR technologies
- CERN responsible, Tomas Fritioff, AB department
- Operational at ISOLDE
- Stable spectra for Argon and oxygen
- Looking forward to exciting “radioactive” charge breeding studies in 2004

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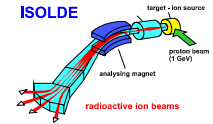


High charge state beam-line

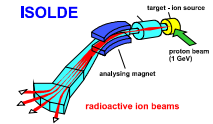




ECR and High charge state beam-line



- Complete ECR tests in 2004
 - Possible continuation in collaboration with LPSC, CLRC (UK) and/or GANIL
- Feasibility study (including optics) completed
 - Detailed cost and engineering study in 2004
 - Presentation of options for INTC and ISCC in the end of 2004
- Technically possible to use existing ECR source in collaboration with CLRC (UK) in 2004 for experiments
 - No high voltage platform (30 kV)



Shutdown 2004

- Shutdown work in progress
- Start-up of HRS separator off-line 15 March
 - RILIS development
 - REX R&D
 - Optics developments
- Start-up off-line of GPS separator first week of April
- First beam to ISOLDE 21 April
 - Physics start 26 April