

ISOLDE scientific coordinator's report

ISOLDE Collaboration Committee, 6 February 2006

L.M. Fraile, CERN PH/IS

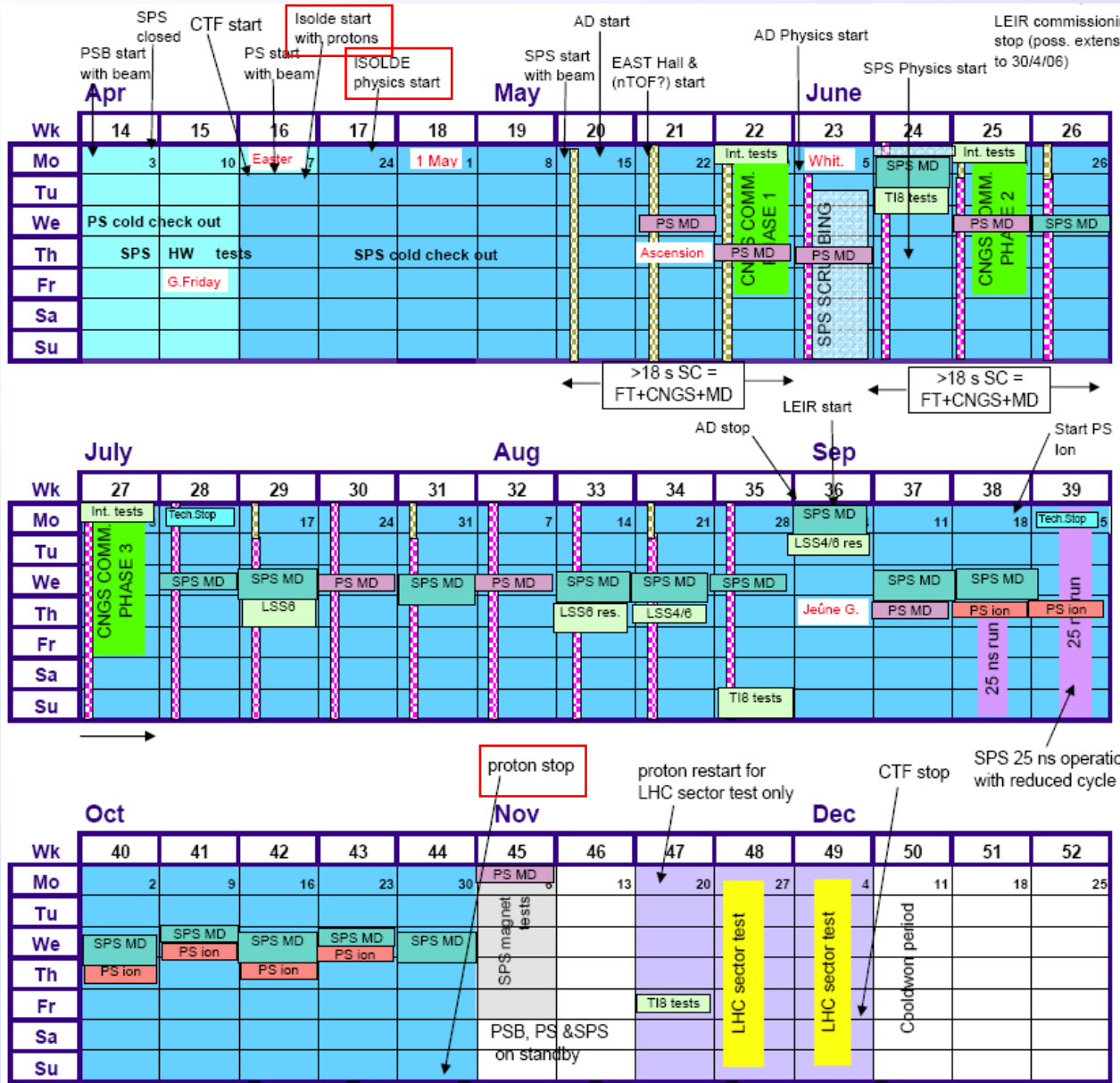
Planning for 2006

Accelerator schedule 2006

- ✓ Approved 1 Sep 05
- ✓ ISOLDE dates:
 - Protons start 18 Apr
 - Physics start 24 Apr
 - Protons stop 6 Nov
 - i.e. 28 weeks for Physics

✓ 503.5 remaining shifts for approved experiments including Nov 2005 INTC meeting

✓ Need input from Feb 2006 INTC meeting!



Limits for schedule 2006

- ✓ Maximum 10 UC_x targets (+ developments)
 - Requests for 2005 campaign = 300 shifts
- ✓ RILIS operation
 - Requests for 2005 amounted to 200 shifts
 - Reached 1850 hours on-line in 2005
 - 45% of INTC shifts (308.5) in 2005
- ✓ REX-ISOLDE
 - 186 shifts left (118 Mini + 13 Dev + 55 2nd BL)
 - 72 requested to INTC (30 Mini + 42 2nd BL)
 - 258 total shifts, beam request *forecast* ~ 170
- ✓ Target development

Offline runs shutdown 2005-2006

✓ Experiments

→ IS366 (+IS391)

^7Be

Planned 2006

→ IS425 (+...)

Offline ^{172}Lu
(possible RILIS)

Planned 2006

✓ Offline developments:

→ IS427 (COLLAPS)

Stable Mg

Done

→ IS439 (COLLAPS)

Stable Cu

Planned 2006

→ IS397 (ECR)

Stable runs

Done

Test @ 60kV

Planned 2006

✓ RILIS developments

→ LoI 60

Au

Done

→ LoI 57

Po

Planned 2006

→ RILIS

Hg (efficiency)

Backup 2006

✓ Other

→ Separator courses

Done

→ Calibration of tape station detectors

Done

INTC 20 February 2006

- ✓ 503.5 shifts from 2005 (63 “active” experiments in Grey-book)
- ✓ Beamtime request *forecast* ~ 330 shifts
- ✓ New requests = 258 shifts:

Exp. no.	Prop. no.	Title experiment	Spokesperson	Shifts left for 2006	Requests INTC Feb 06
IS386	P127	Studies of electric dipole moments in the octupole collective regions of heavy Radiums and Bariums	Mach - Zylic	2	4
IS398	P144	Studies of the Beta-Decay of Sr nuclei on an near the N=Z line with a Total Absorption Gamma Ray Spectrometer	Rubio	0	11
IS411	P156	Coulomb Excitation of neutron-rich A~140 Nuclei	Kröll	19	15
IS413	P160	High precision mass measurements of exotic nuclei with ISOLTRAP	Blaum	0	30
IS414	P162	Advanced Time-Delayed coincidence studies of $^{31,32}\text{Mg}$ from the β -decays of $^{31,32}\text{Na}$	Mach - Thirolf	0	14
IS415	P166	Magnetic Moments of Coulomb Excited 2^+_1 States for Radioactive Beams of $^{132,134,136}\text{Te}$ Isotopes at REX-ISOLDE	Speidel - Jungclaus	3	15
IS434	P191	A Study of the r-Process Path Nuclides, Sb-137, Sb-138, Sb-139 Using the Enhanced Selectivity of Resonance Ionization Laser Ionization	Walters	0	15
new	P199	Shape effects along the Z=82 line: study of the beta decay of $^{188,190,192}\text{Pb}$ using total absorption spectroscopy	Algora	--	15
new	P201	Ultra fast timing measurements at ^{78}Ni and ^{132}Sn	Mach	--	20
new	P202	Diffusive, Structural, Optical, and Electrical Properties of Defects in Semiconductors	Deicher	--	40
new	P203	Mössbauer studies of dilute magnetic semiconductors	Fanciulli	--	20
new	P206	Exploring halo effects in the scattering of ^{11}Be on heavy targets at REX-ISOLDE	Borge	--	27
new	P207	Experiments with the newly available Carbon beams at ISOLDE - Resonance scattering and decay studies.	Fynbo	--	32

TOTAL 258