

Irradiation Facilities at CYCLONE (HIF – LIF – NIF)

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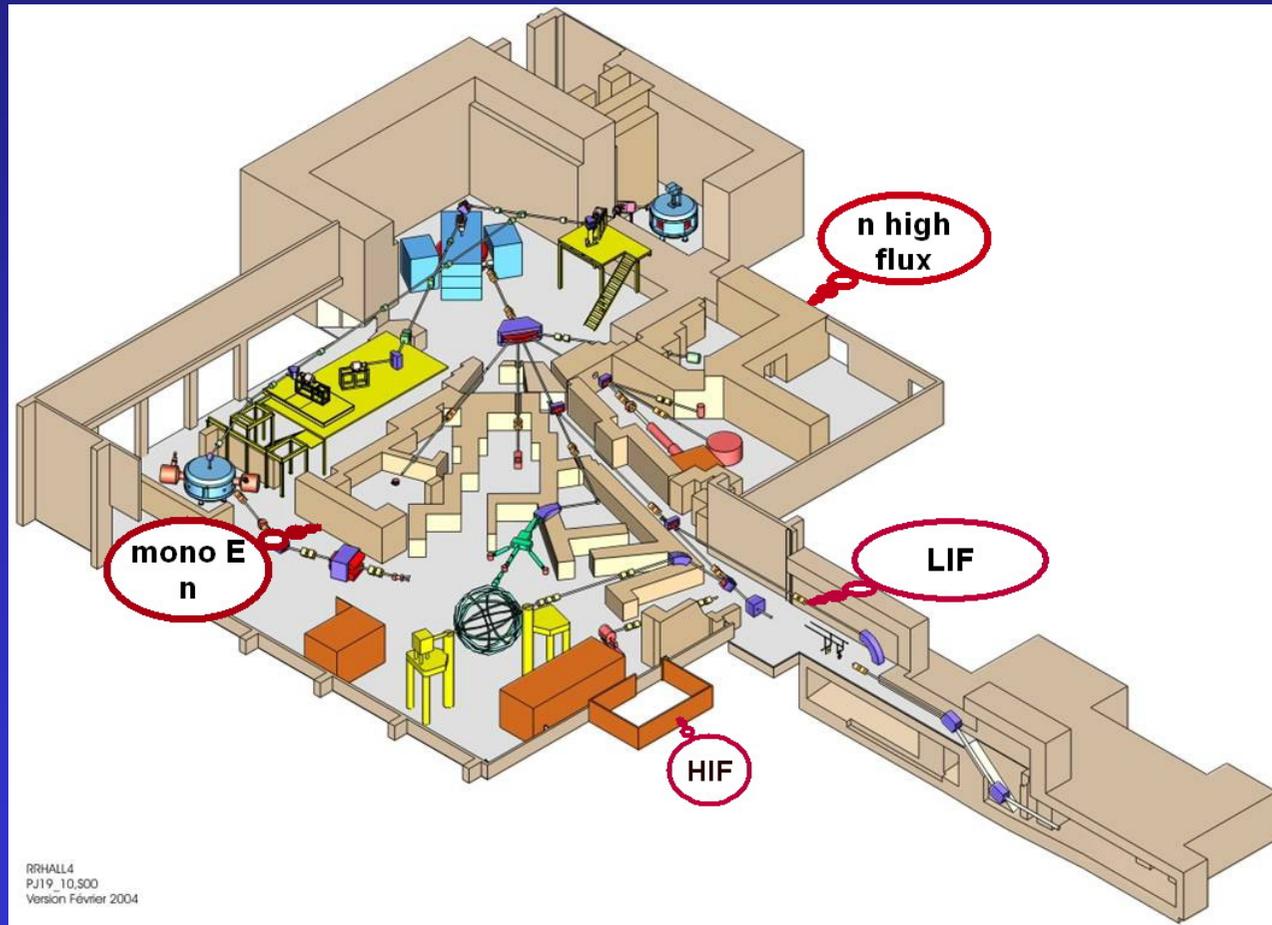


Outline

- ✓ HIF Status
- ✓ LIF Status.
- ✓ NIF Status.
- ✓ Beam Scheduling: a New Approach.



CYCLONE



HIF



- 2006 Utilization : Nearly 1400 h scheduled (57 days).
- 2006 Development : PPAC detectors reliability.
- Foreseen Upgrade : New ECR source.
Reliability improvement of the frame.
UI in Lab View.



Light Ion irradiation Facility (LIF)

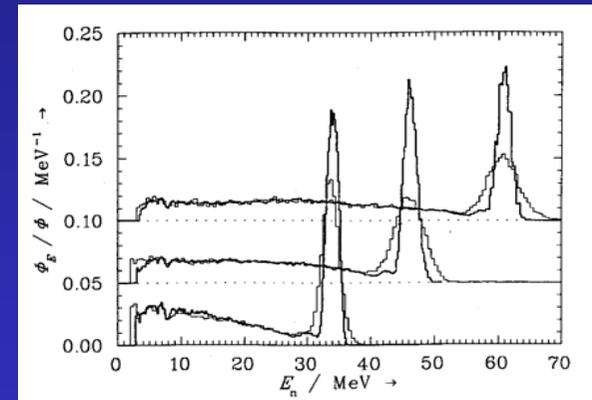
Actual status and development will be presented on
Wednesday PM



Neutron Lines (NIF)

Two lines are available:

➤ Mono Energetic Line

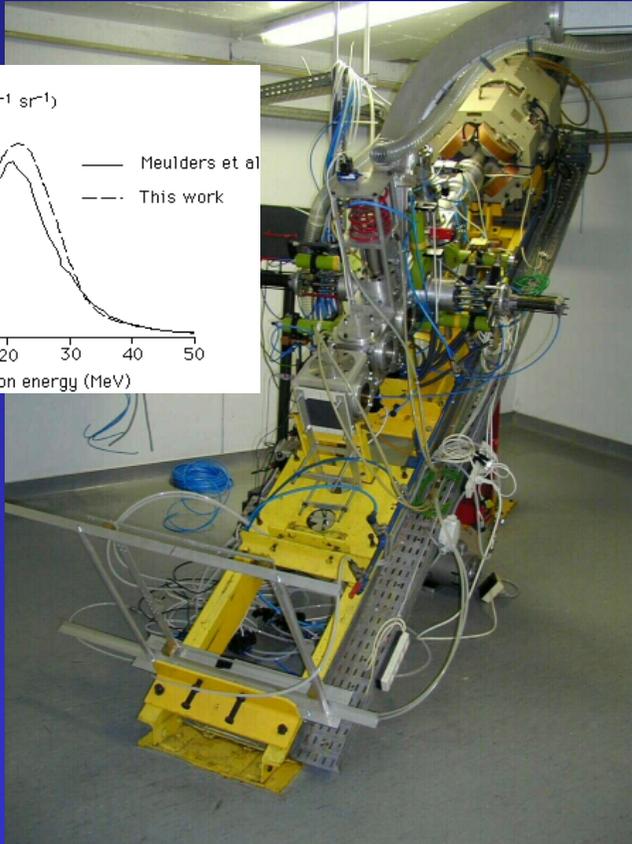
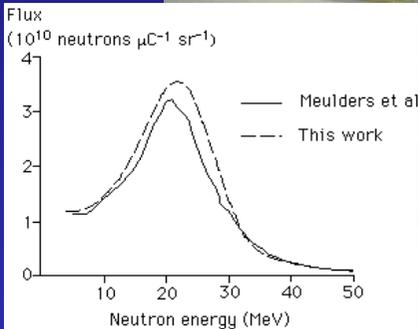


➤ High Flux Line ← will be upgraded

($7.3 * 10^{10}$ neutrons / cm² s at 9 cm from target)



Neutron Lines (NIF)



New fixture system

- Motor controlled (LabView)

Lateral Stroke	30 cm
Vertical Stroke	10 cm
Precision	1 mm
Speed	5mm/sec

- Laser alignment system



Beam Scheduling

- o HIF :
 - Two 5 days period per month (Monday 8 AM to Friday 12 PM).
 - One ion cocktail per period.
- o LIF : Two 3 days periods per 6 months.
- o NIF : On request.

