



ATF2: laser-wire layout

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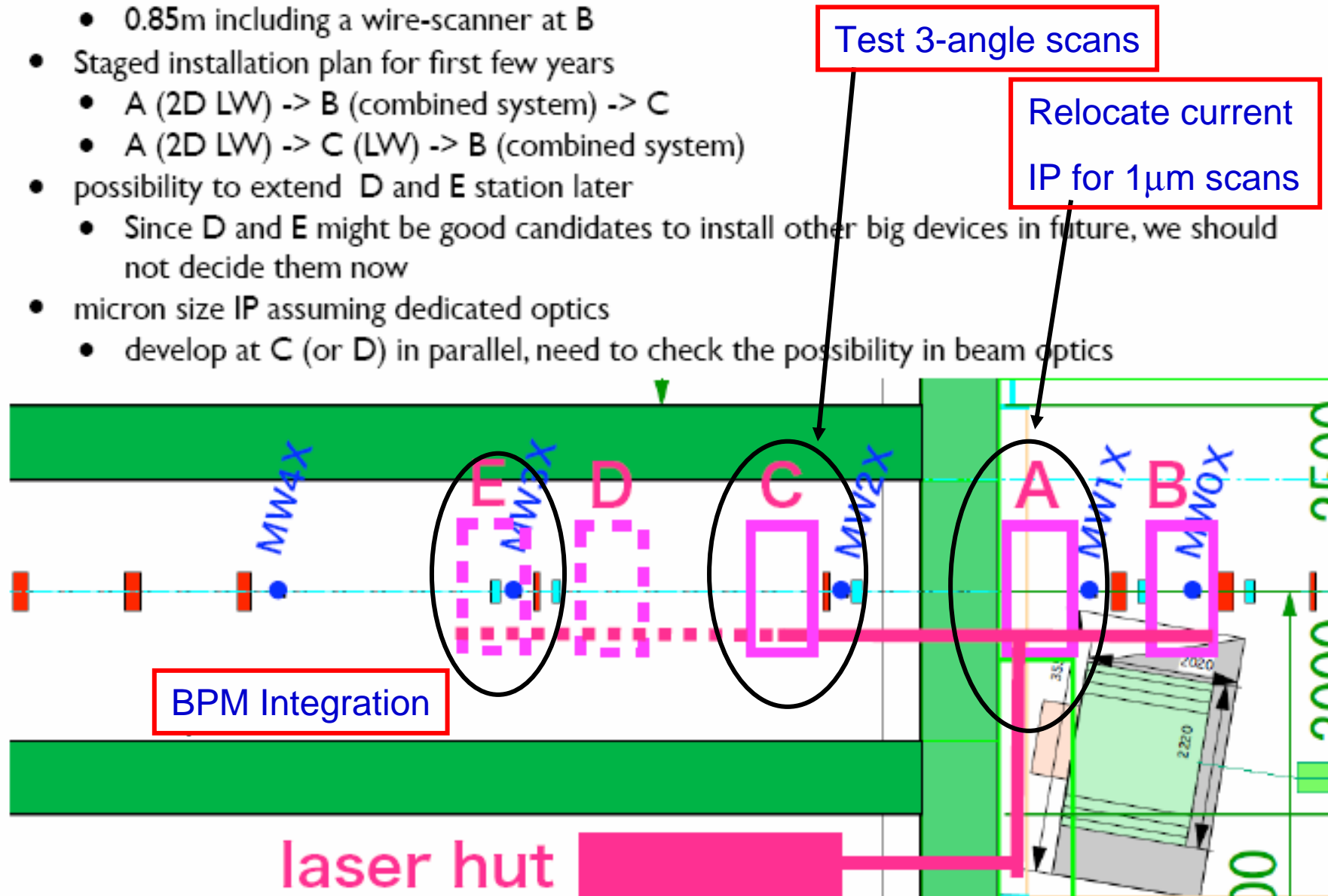


Third ATF2 Project Meeting,
KEK,
18th December 2006

- General Strategy
- Staged implementation / schedule

Location of laserwire-scanners

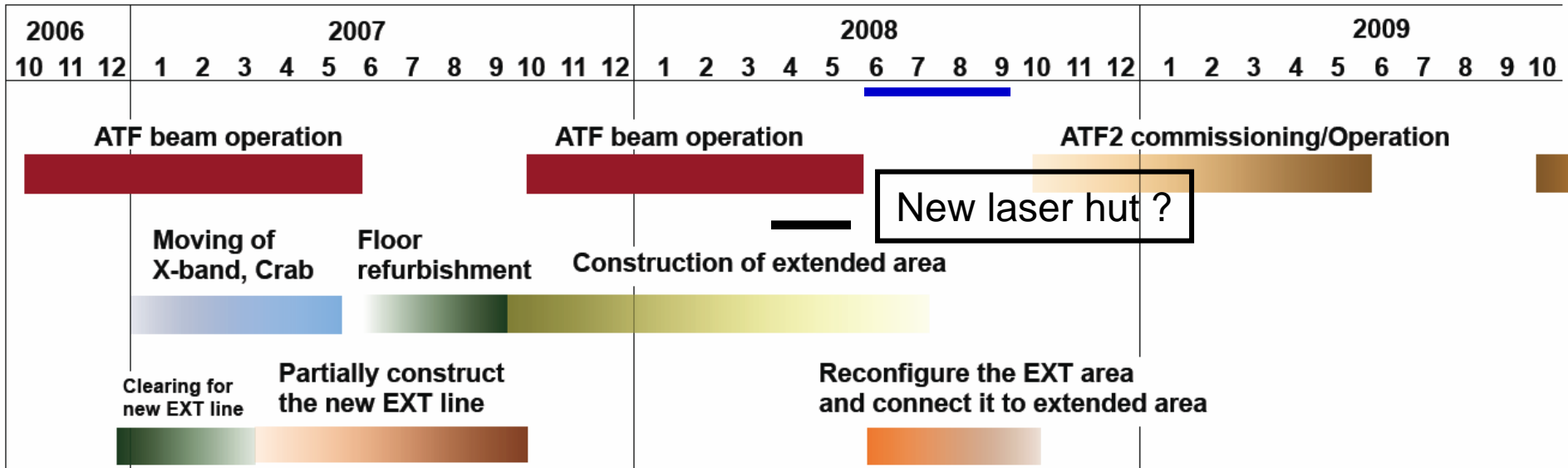
- Looking for 1m free spaces in the diagnostic section
 - 1.2m free space at A
 - 0.85m including a wire-scanner at B
- Staged installation plan for first few years
 - A (2D LW) -> B (combined system) -> C
 - A (2D LW) -> C (LW) -> B (combined system)
- possibility to extend D and E station later
 - Since D and E might be good candidates to install other big devices in future, we should not decide them now
- micron size IP assuming dedicated optics
 - develop at C (or D) in parallel, need to check the possibility in beam optics



Timescale

LW data taking

Vacuum vessel + detector + laser
Relocation/Installation



New laser hut ?

Install light path
(or dummy vacuum tube)

Design of new vacuum vessel

Summary

Aim at sub-functionality (separate) tests: at ATF

- 1 μm measurements + systematics using existing vacuum vessel
- Develop a new vacuum vessel + optics for 3-angle scans (lead time approximately 9 months – starting in about March 07)
- Develop light transport system; install core system (or ‘dummy’) at beginning of project.
- Move to new laser hut towards end of 2008 run. This will require that the new hut is ready to move in to.

Staged approach: start with sub-systems:

- 3-direction scans, possibly with integrated wire scanner
- micron-scale system
- BPM integrated system

Depending on funding, increase number of 3-direction LW's sequentially.