

Proposal of a Work Package LET Beam Dynamics

(or some other structure)

(LET: Low Emittance Transport)

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Daniel Schulte, Peter Tenenbaum
and Kiyoshi Kubo

LET Beam Dynamics Studies by Accelerator Physics T.S. Group

- Static (with fixed errors. e.g. misalignment) tuning studies have been advanced greatly.
 - Including RTML and BDS, not only for the Main Linac.
- Crosschecking using many simulation codes (and code benchmarking) is another big success.
- Dynamic (with changing errors) simulations and inter-area simulations had been started and are progressing, but far from completion.

(We had a face-to-face meeting at Daresbury in January.
And we agreed to continue our studies.)

Proposal: LET Beam Dynamics WP

“WP” or some other structure

- Mission
 - Check and demonstrate the luminosity performance
 - Mainly by calculations and simulations
 - Cover from the exit of DR to IP, or to dumps
- It can be reformed “Accelerator Physics” Group for RDR
- Why we need this WP
 - Some of beam dynamics issues can be studied by area by area.
But,
 - There are some inter-area issues.
 - Dynamic (time changing) effects
 - Feedback, interference between areas.
 - There are common problems, tools and manpower.