Summary of IP configuration session

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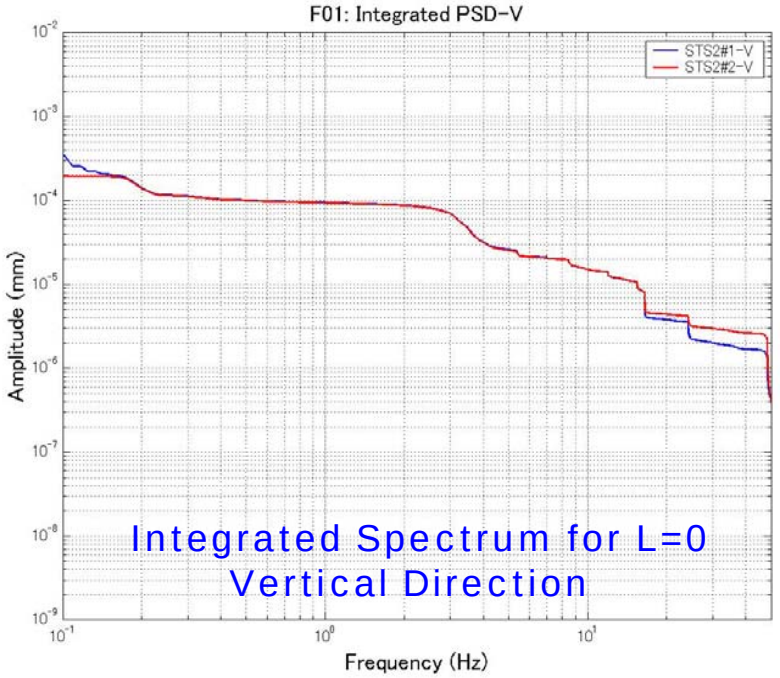
3rd ATF2 project meeting
KEK, 20 December 2006

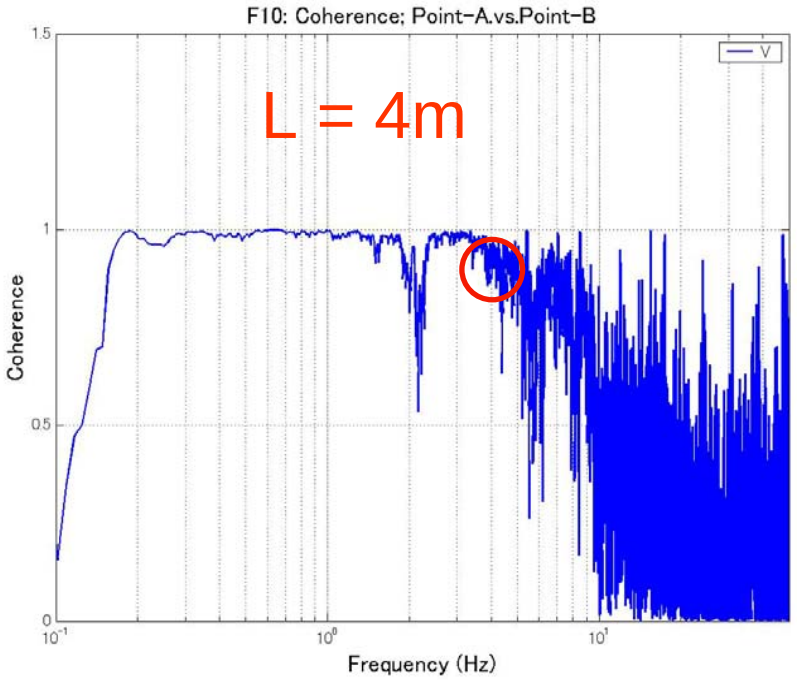
Floor Movement Measurement

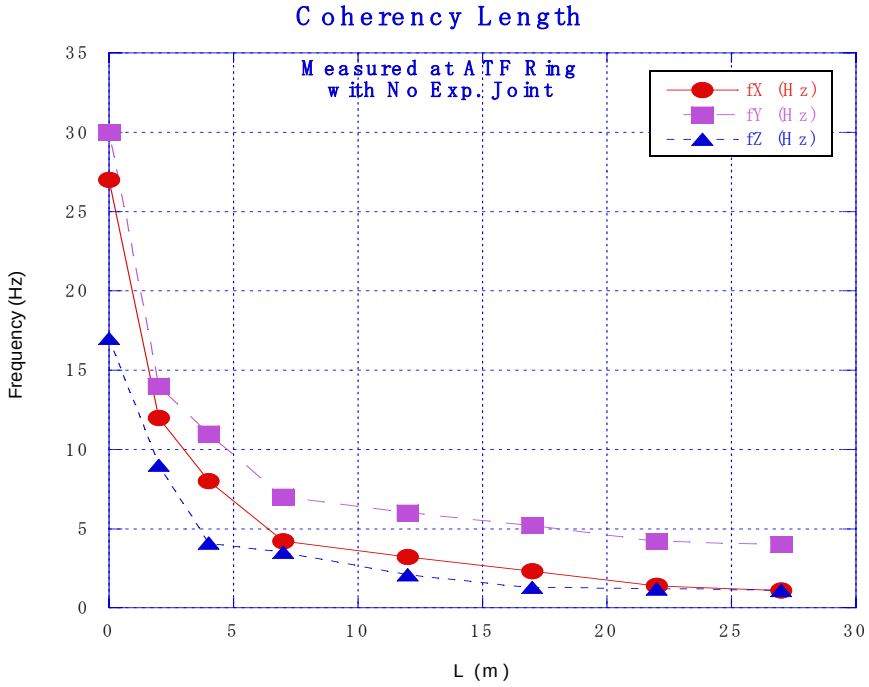
at ATF Ring

R. Sugahara, M. Masuzawa, H. Yamaoka

Measured on October 31, 2006

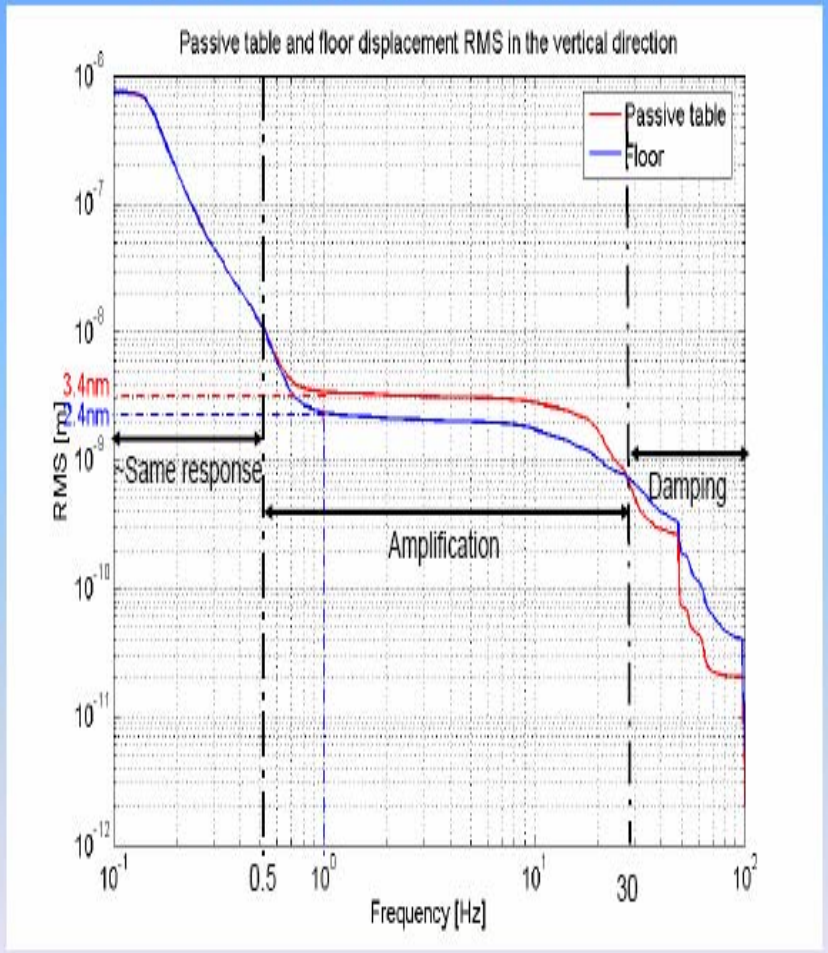






2. Vibrations of the passive table

Vertical direction: Integrated RMS

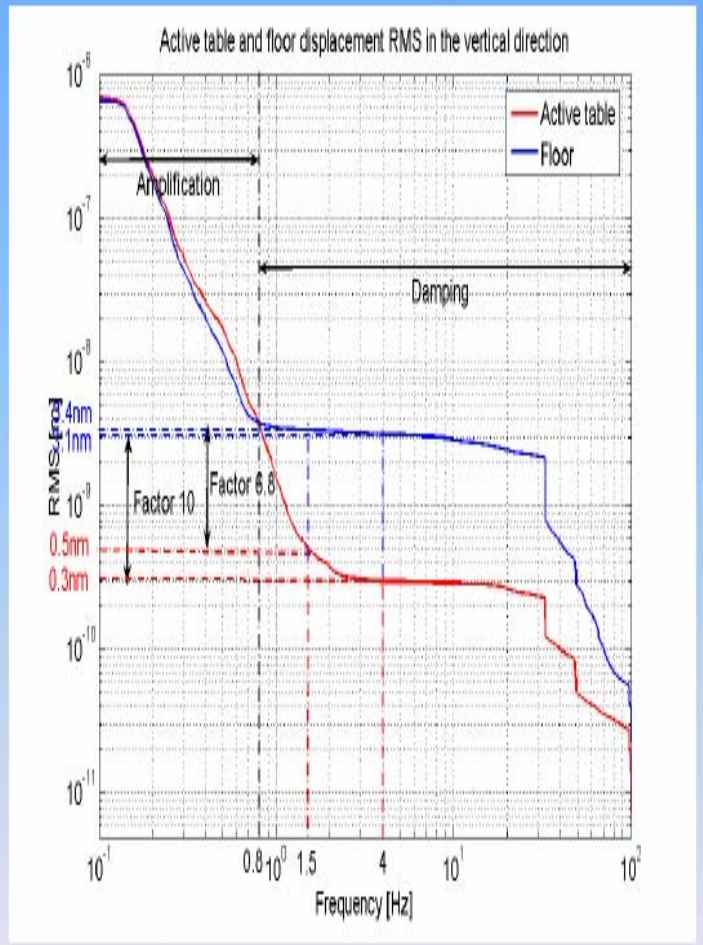


✓ **Below 0.5Hz:** No amplification or damping on the table

✓**Above 0.5Hz:** Amplification and damping begins only above ~30Hz

3. Vibrations of the active table

Vertical direction: integrated RMS



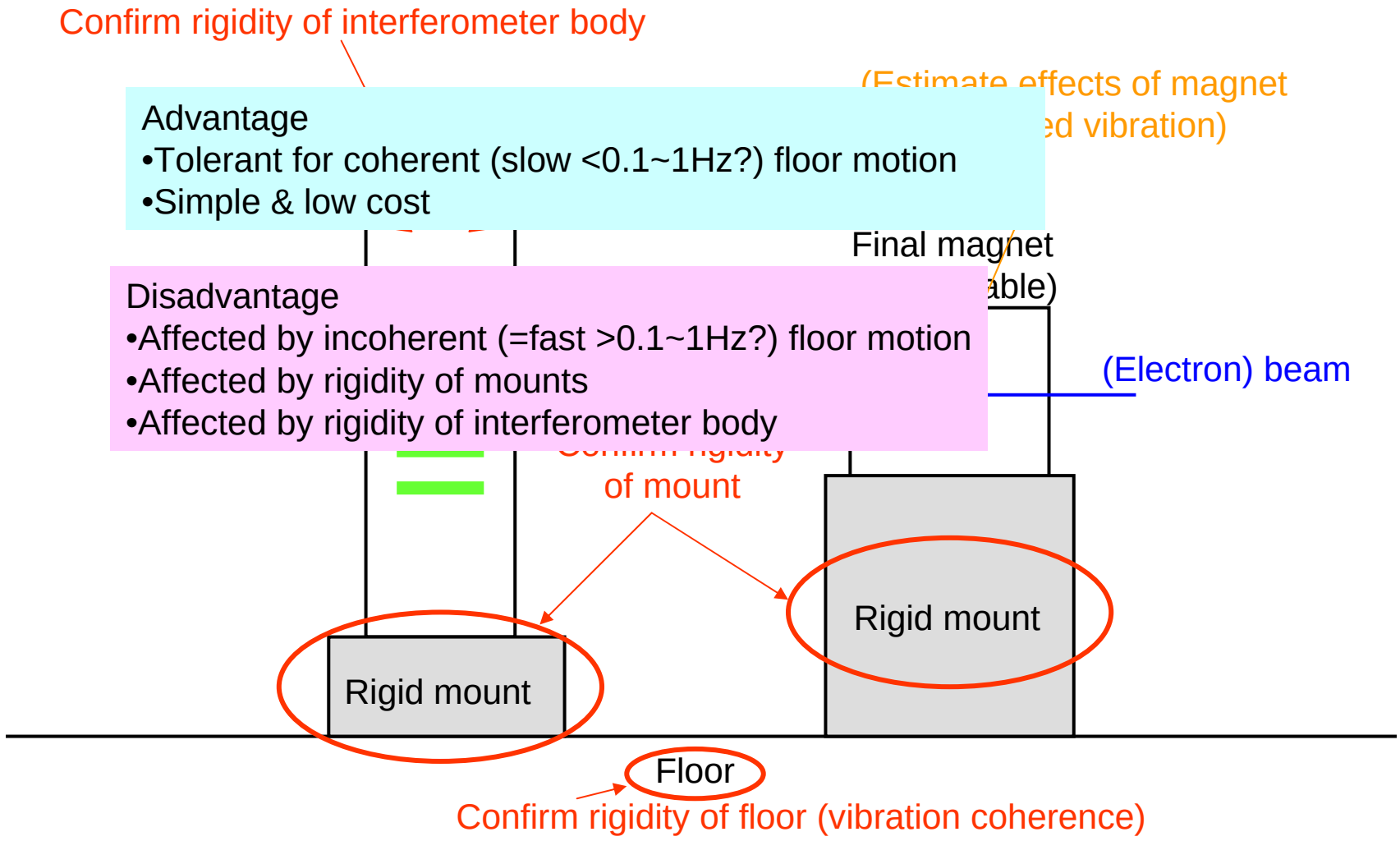
✓ **Below 0.8Hz:** Amplification on the table ✓ **Above 0.8Hz:** Damping on the table

→ Factor 7 of damping above 1.5Hz

Proposal 1 for relative stability around IP:

Rigid mount on floor

using individual rigid mount for supporting interferometer and f.f.magnet



Schedule : movers

•Send CLIC CERN table a little before arrival of QD0 (and other final focus section) magnets (end of 2007, beginning 2008)

•But since our measurements show that the CLIC CERN table is not ideal for ATF2 Final Focus section

=> work on alternative support :

•Rigid mount or rigid mount with polymer sheet

•Eigenmode simulations or dynamic simulations if measurements done on support

=> work with Sugahara san and Kume san

MONALISA

ATF2: Measuring Motion of Shintake Monitor with Respect to Final Doublet

- Idea of Compact Straightness Monitor (CSM) presented in May: