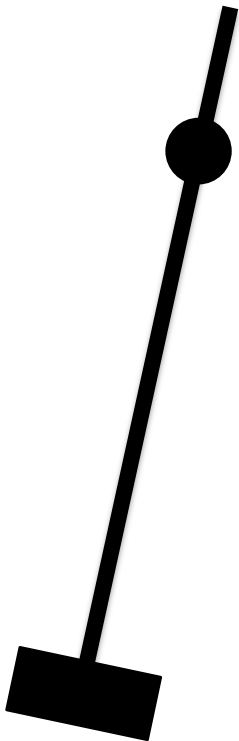
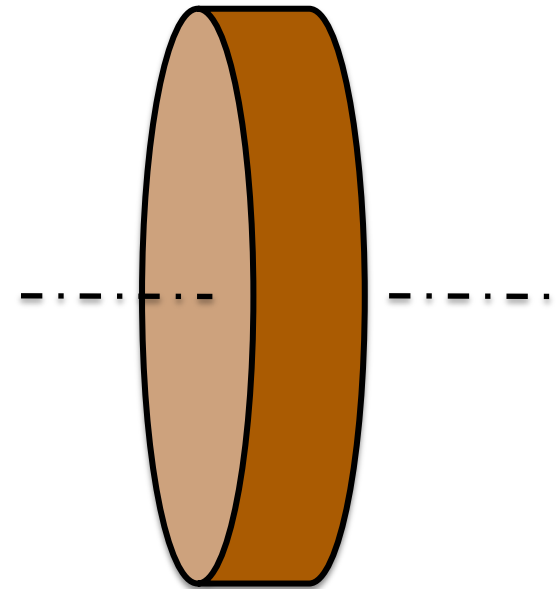


Target studies for the ILC conventional e⁺ source -- pendulum target --



18-July-2013
ILC-CLIC e⁺ studies
T. Omori

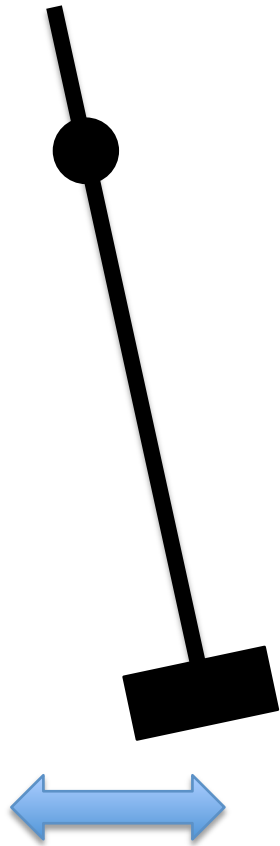


Target study team:

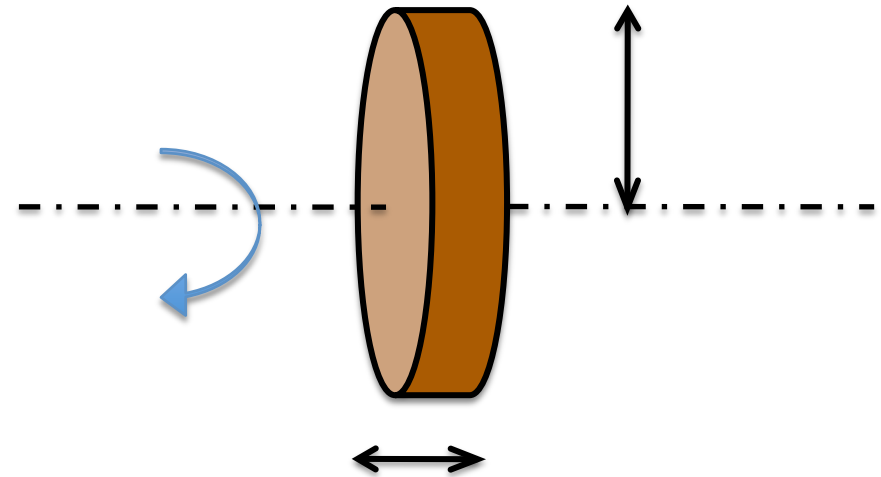
K. Yokoya (KEK), J. Urakawa (KEK), M. Yamanaka (KEK),
T. Takahashi (Hiroshima), M. Kuriki (Hiroshima), and T. Omori (KEK)

We study 2 types of targets

5 Hz pendulum
with bellows seal

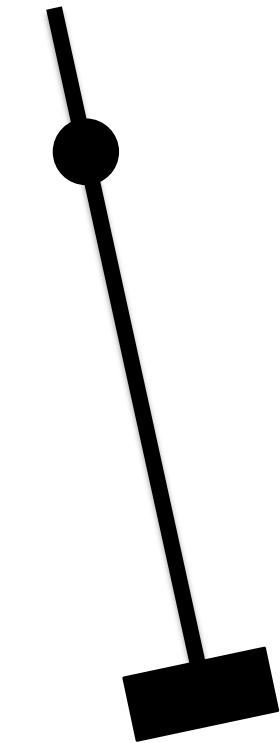


Slow rotation target
with ferromagnetic
fluid seal



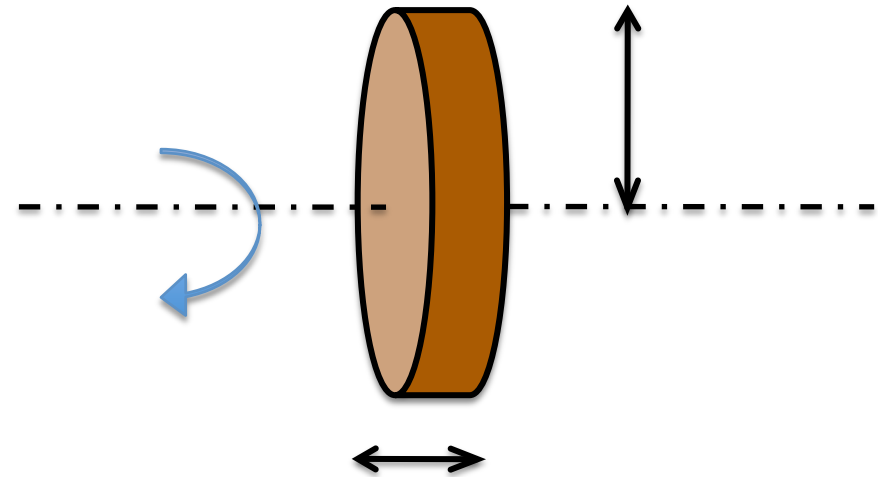
We study 2 types of targets

5 Hz pendulum
with bellows seal



Today

Slow rotation target
with ferromagnetic
fluid seal

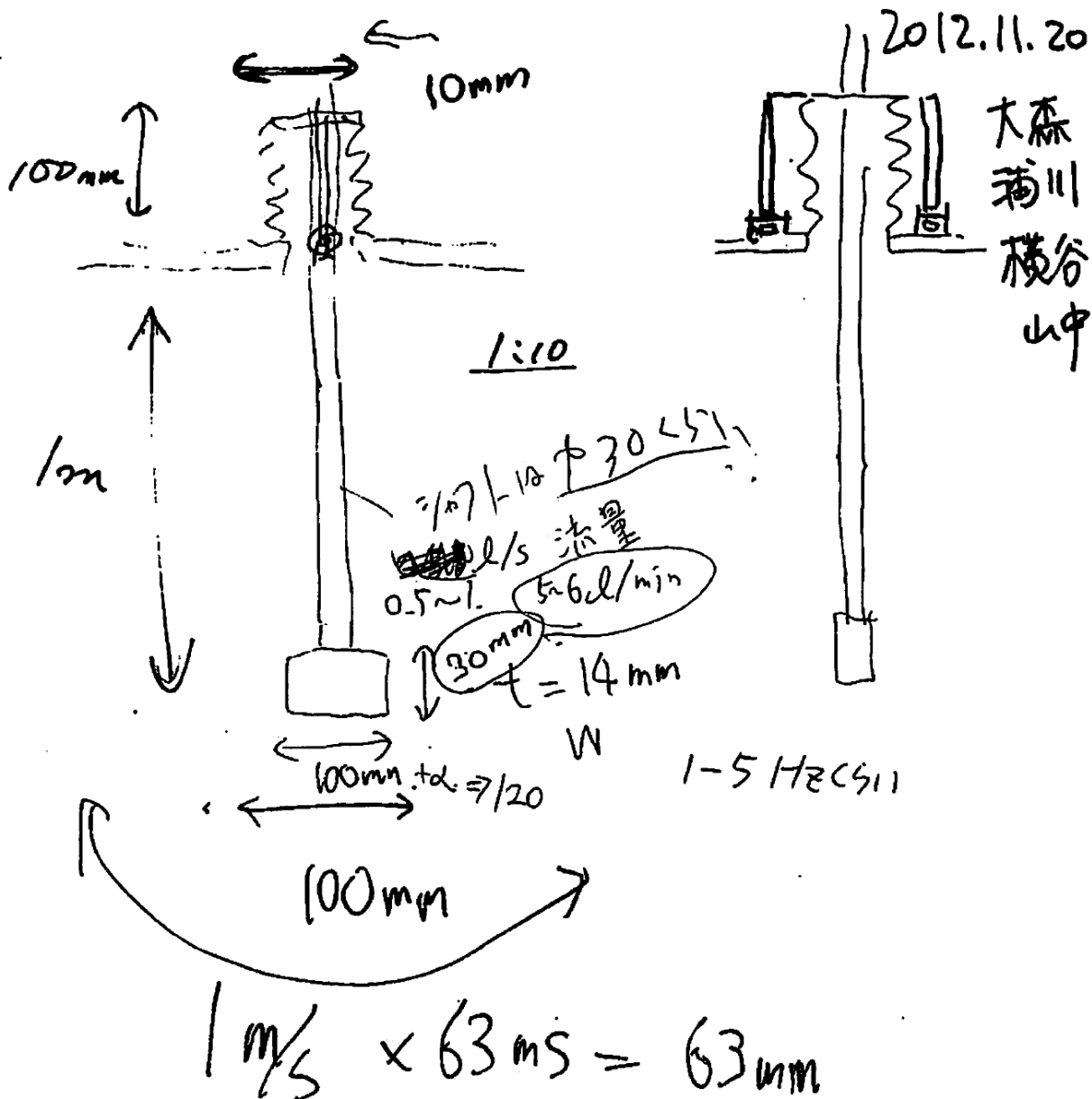


Plan of test: 5 Hz pendulum with bellows seal

ダンクステンタ-ギット
の振子
接続するバローズ
の耐久テストベンチ
1-7112

5Hzでストローク100mm
振子か?

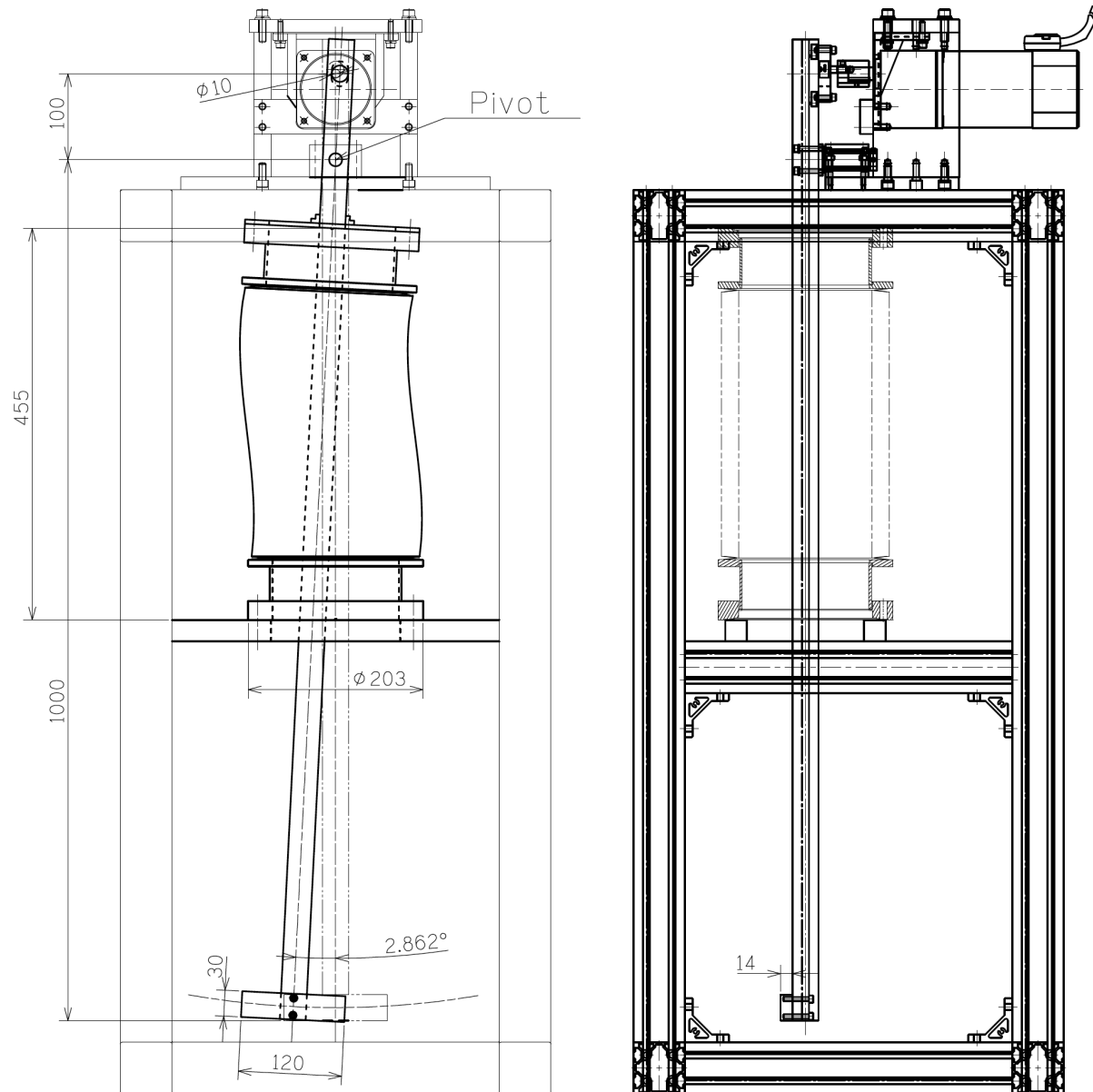
半年くらいの耐久テスト



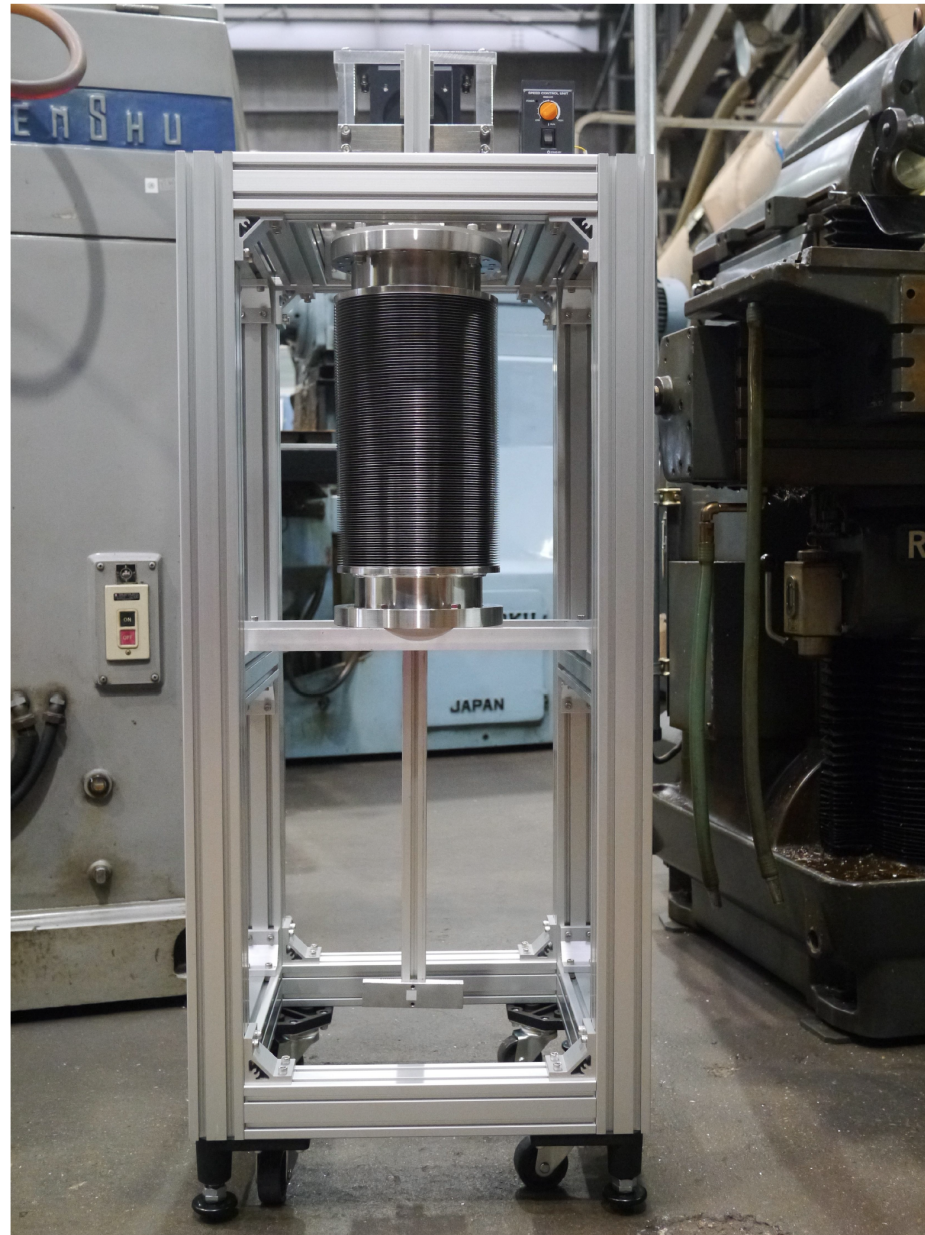
Toy model: 5 Hz pendulum (no bellows)



Drawing of the model with bellows (in air)



New: Photo of the model with bellows (in air)



Summary

1. We make tests of the target for ILC conventional e^+ source.
2. We plan to test two types of targets.
 - * 5 Hz pendulum target with bellows seal
 - * Slow rotation target with ferromagnetic fluid seal
3. We made a toy model of the 5 Hz pendulum target.
No mechanical difficulty to made 5 Hz motion with 100 mm stroke (with no bellows).
4. Next step for pendulum target is long term test with bellows. --> We see the life time of the bellows.
The model with bellows is assembled.
We will start long term test soon, after some adjustments.
5. Discussion with Rigaku is underway for slow rotation target.