First test of light guide transmission

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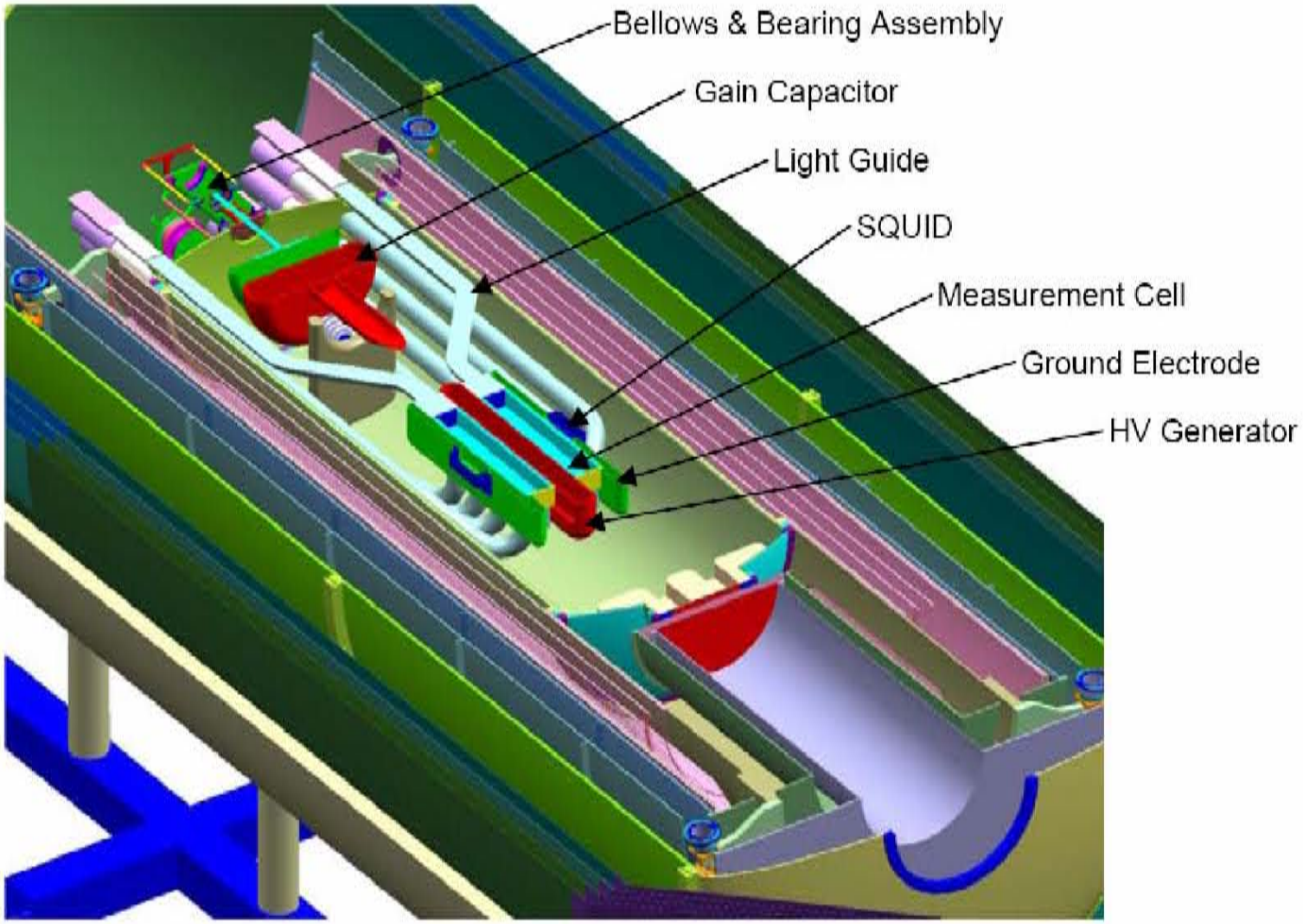
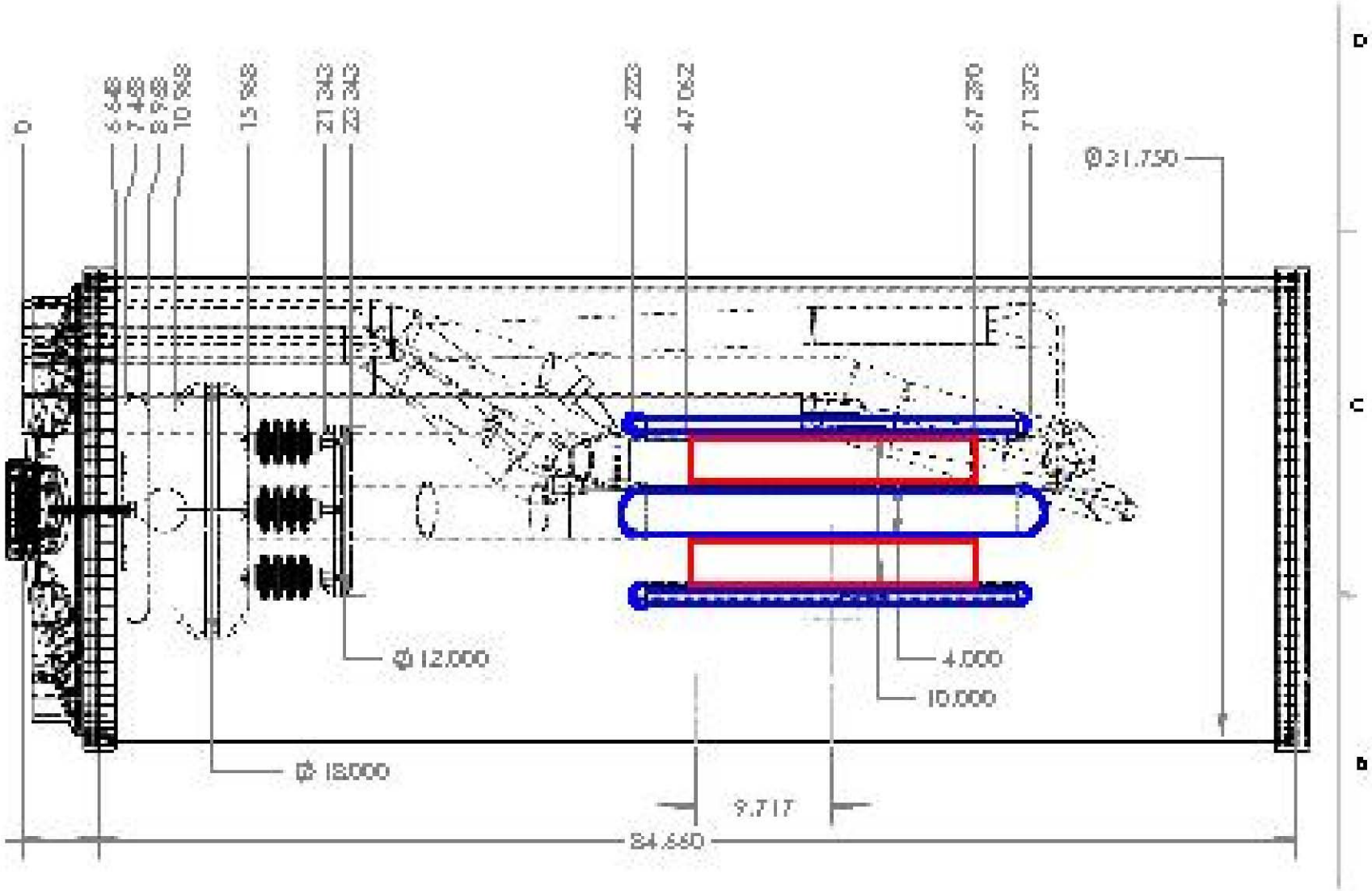
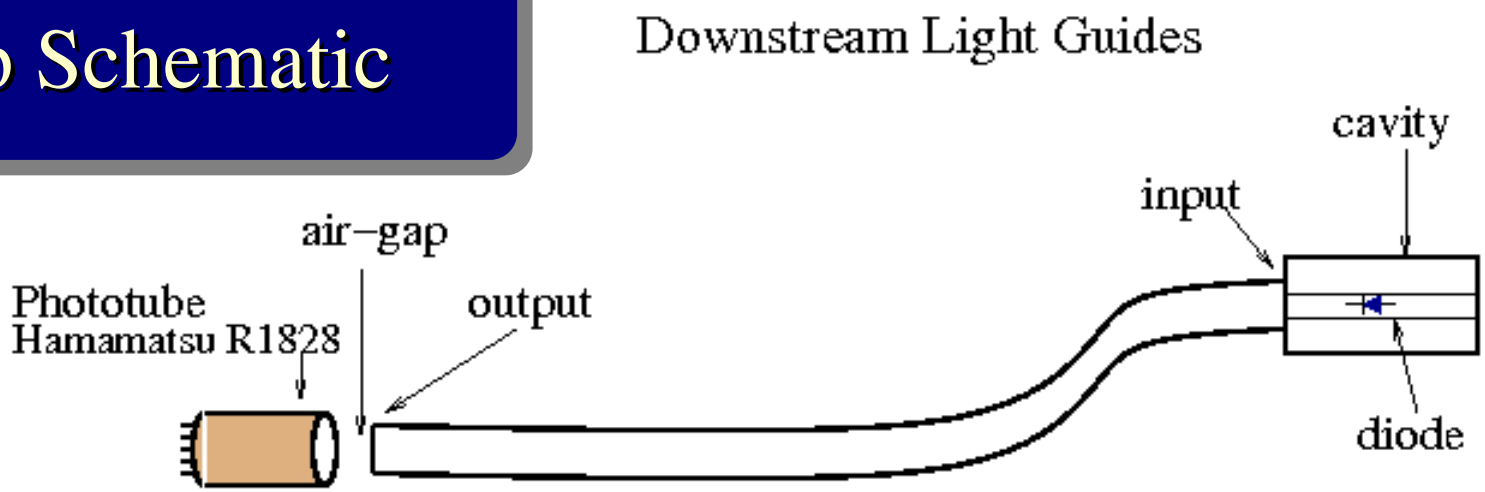
The Big Picture ...



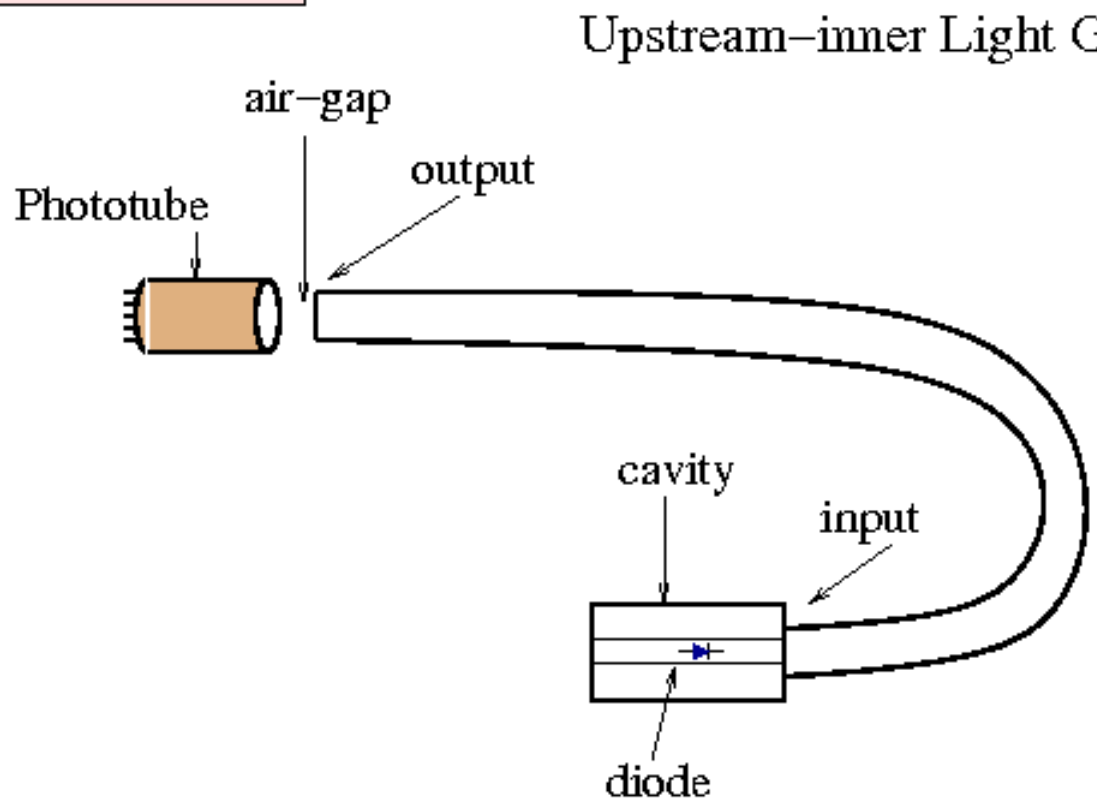


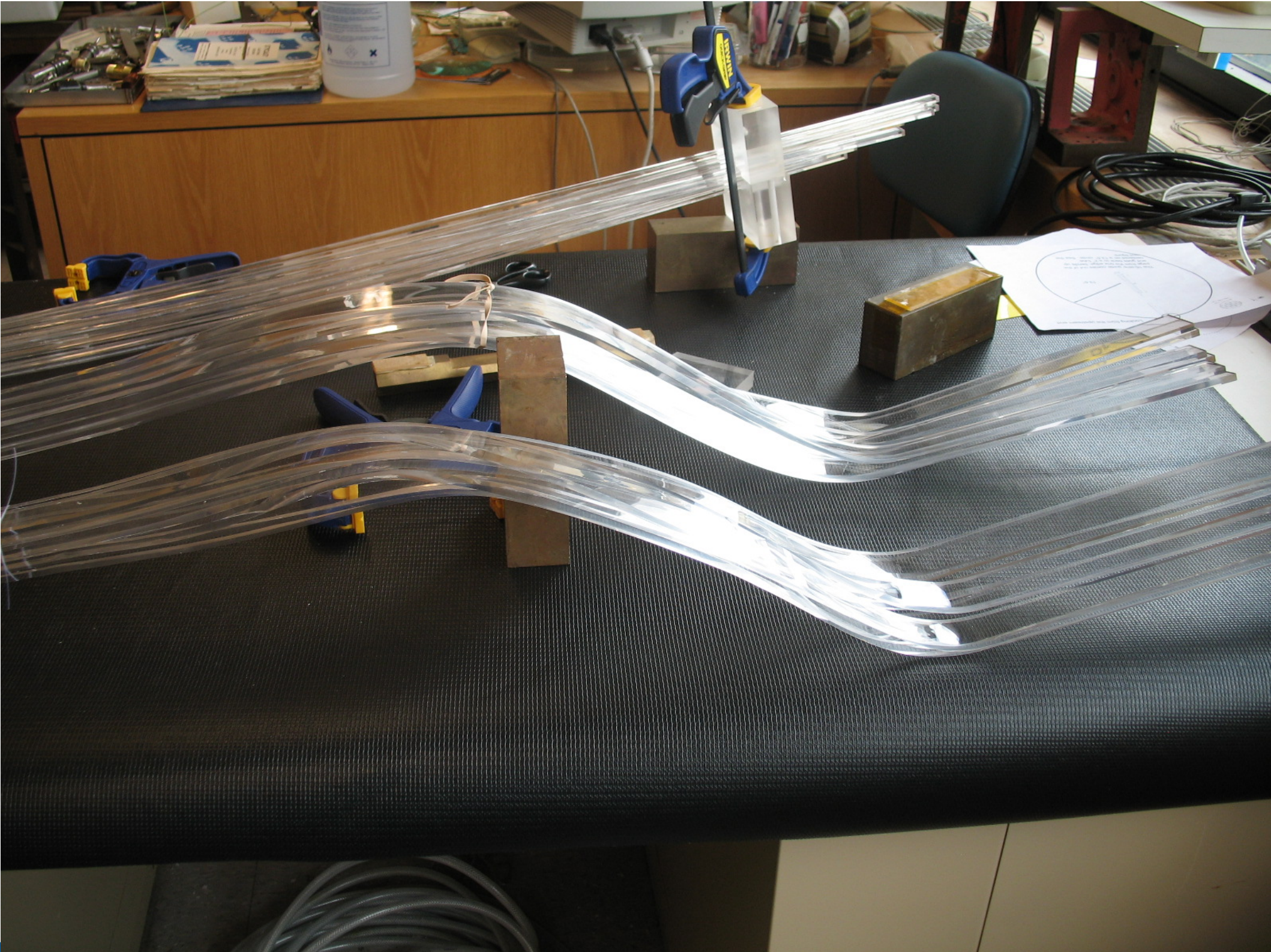
0
6.648
7.468
8.968
10.968
15.968
21.343
23.343
43.223
47.062
67.370
71.373
Ø31.750
Ø12.000
4.000
10.000
Ø18.000
9.717
84.660
D
C
B

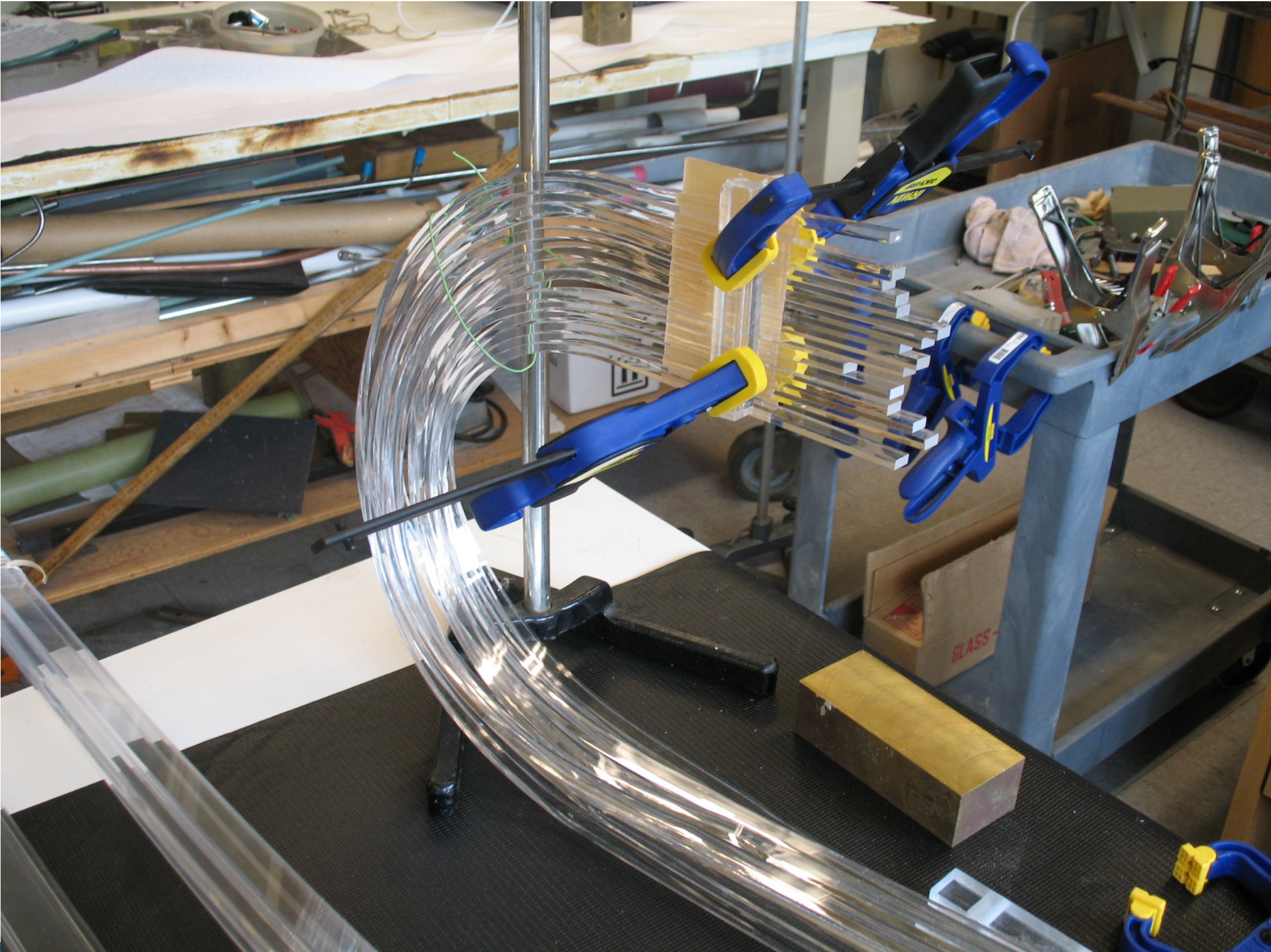
Setup Schematic

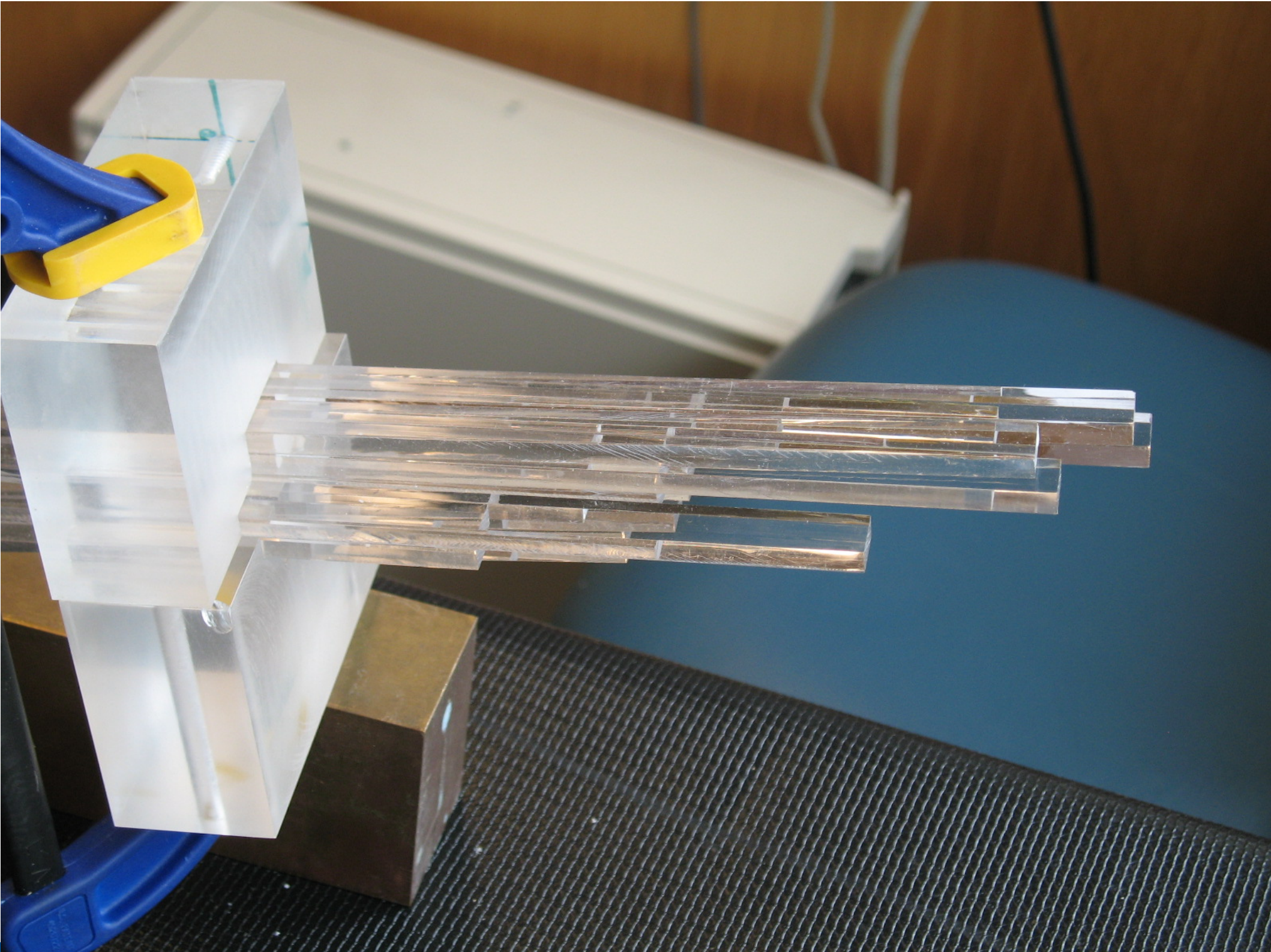


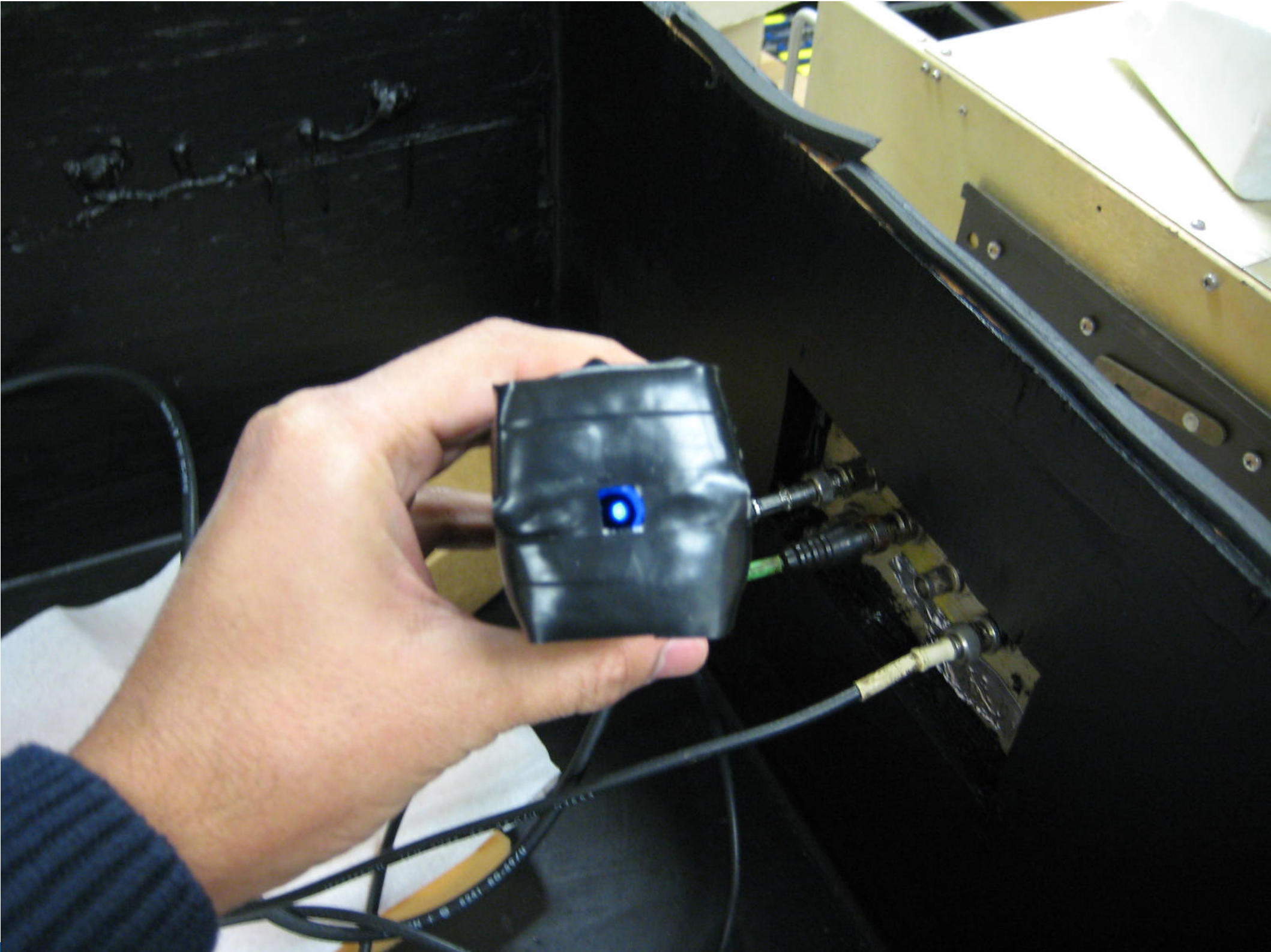
* Figures not to scale



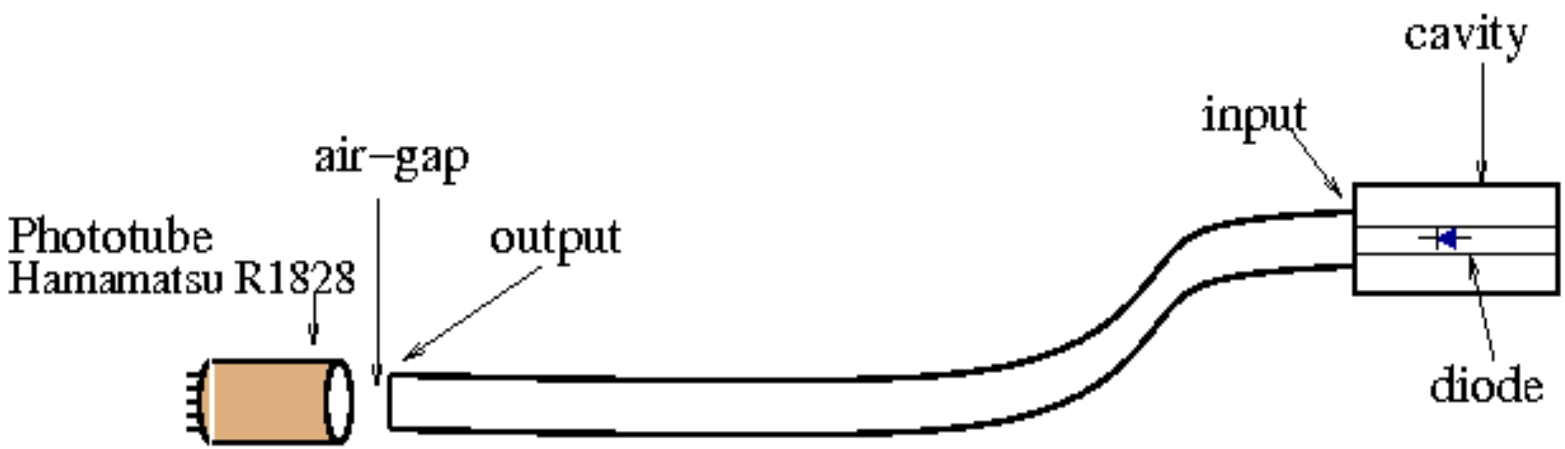








Downstream Light Guides



* Figures not to scale

First Results

- Both light-guides about 72" of lucite.
- The short light guide is 24" of lucite.

type	transmission	error estimate
downstream	34.96%	+/- 15% (relative)
upstream-inner	21.20%	+/- 20% (relative)

the short one	67.60%	+/- 15% (relative)

Summary and plan

- First results in agreement with UMd simulations.
- Detailed DAQ and controlled motion mechanisms being setup.
- ==========
- Test correct length downstream guides (47").
- Improve statistics
- Test transmission with Silastic® cookie
- Cold tests?