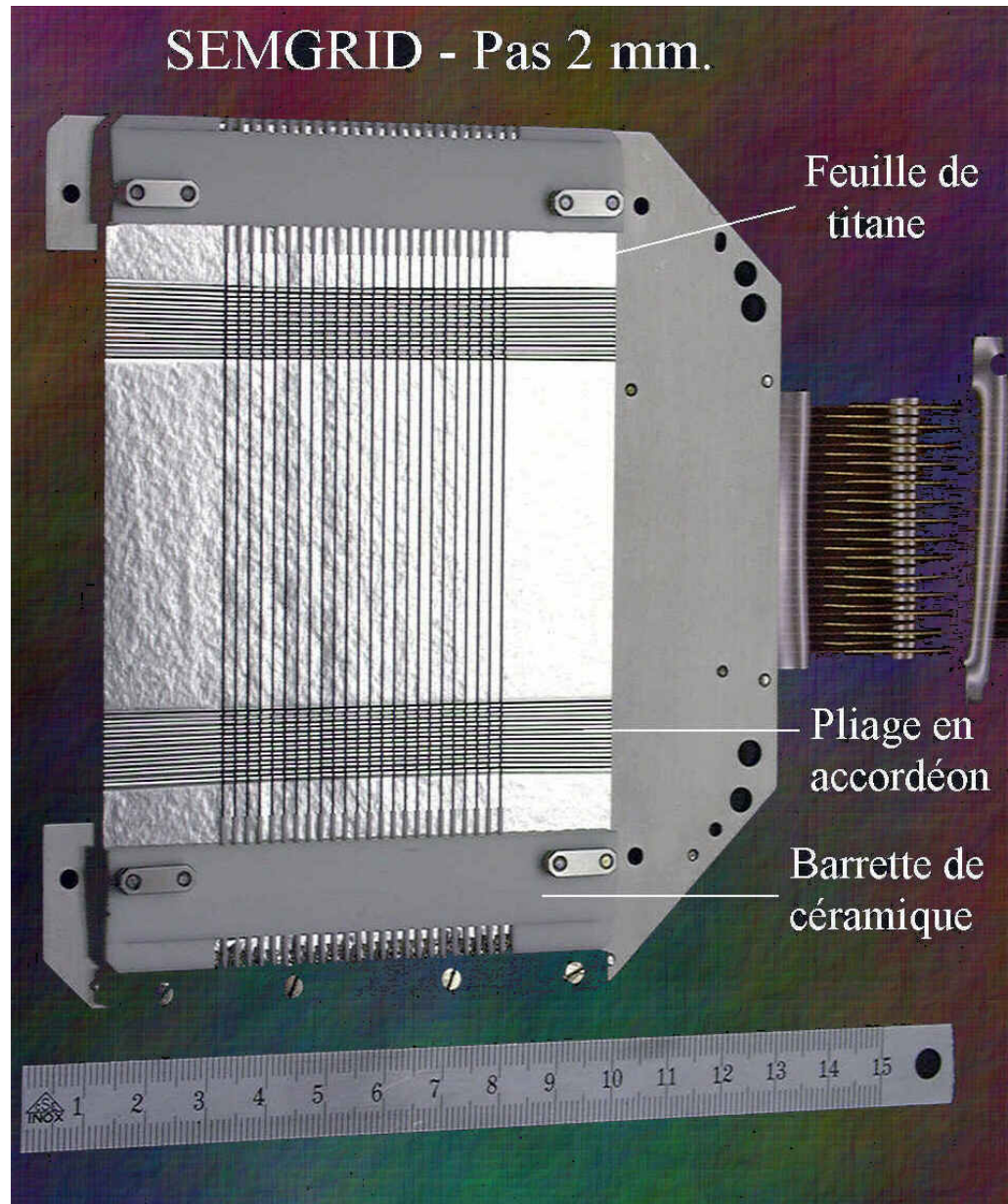


Secondary Emission Beam Profile Monitor

H. Haseroth, CERN

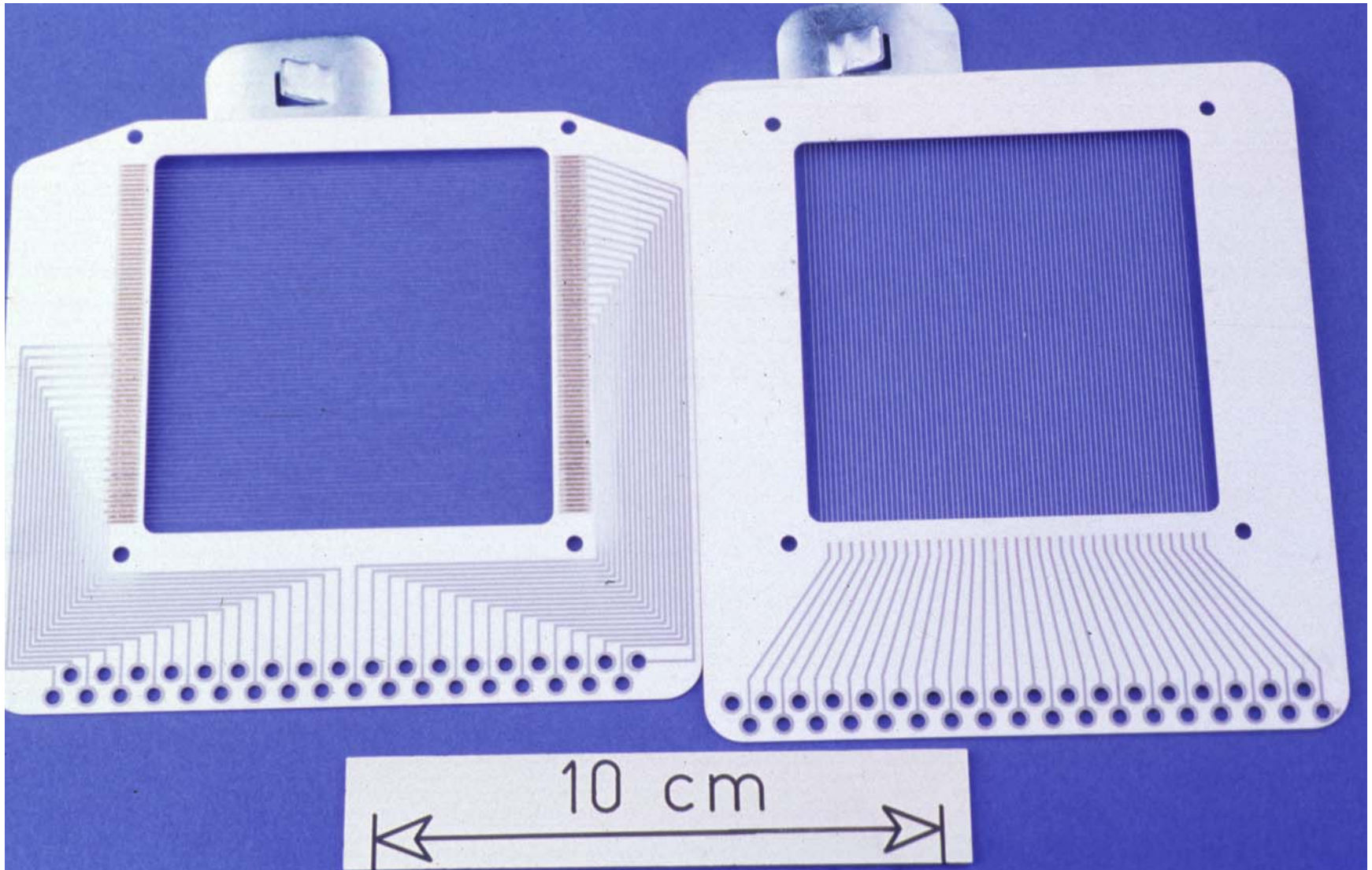
SEM
(**S**econdary
Emission
Monitor)-grids

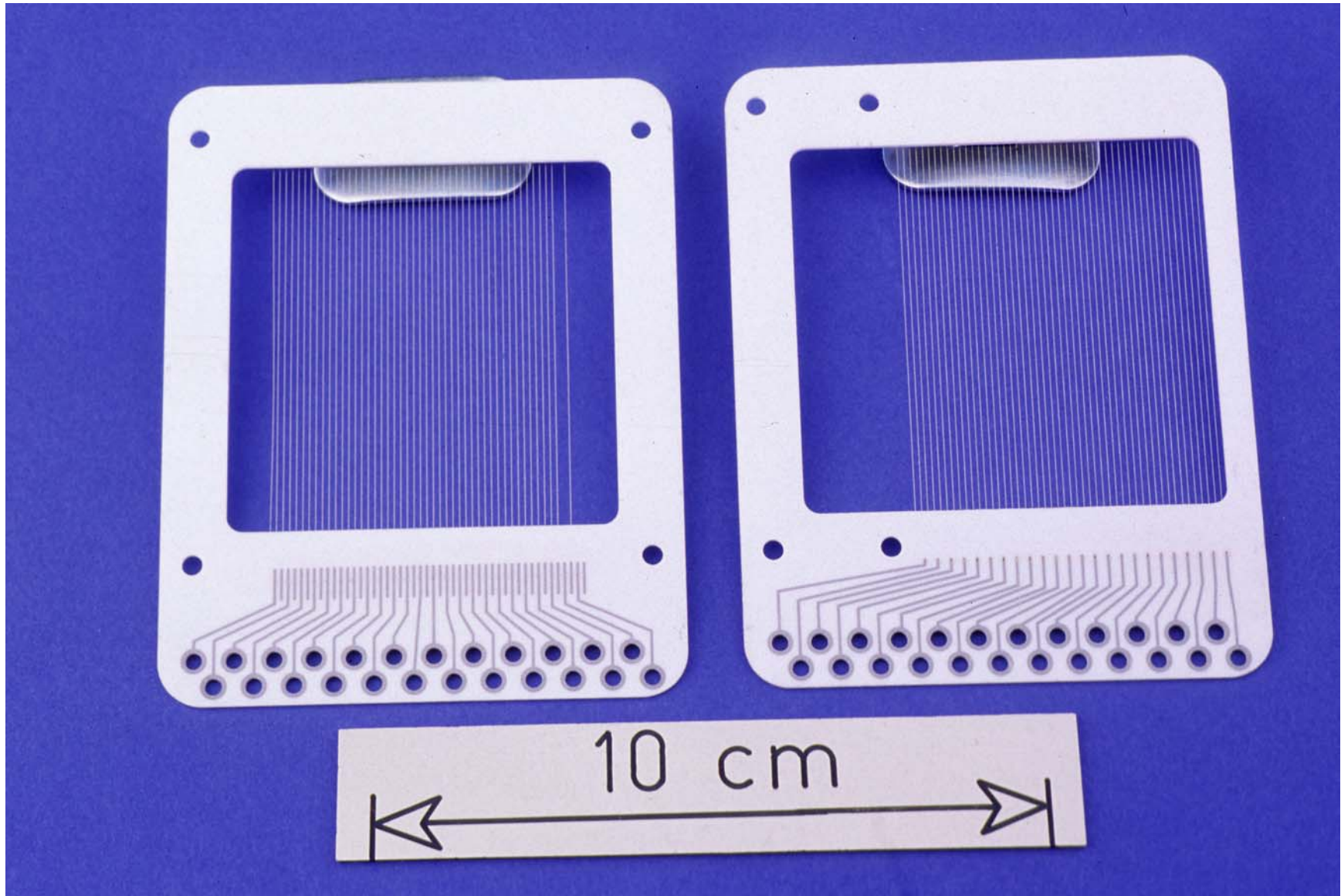


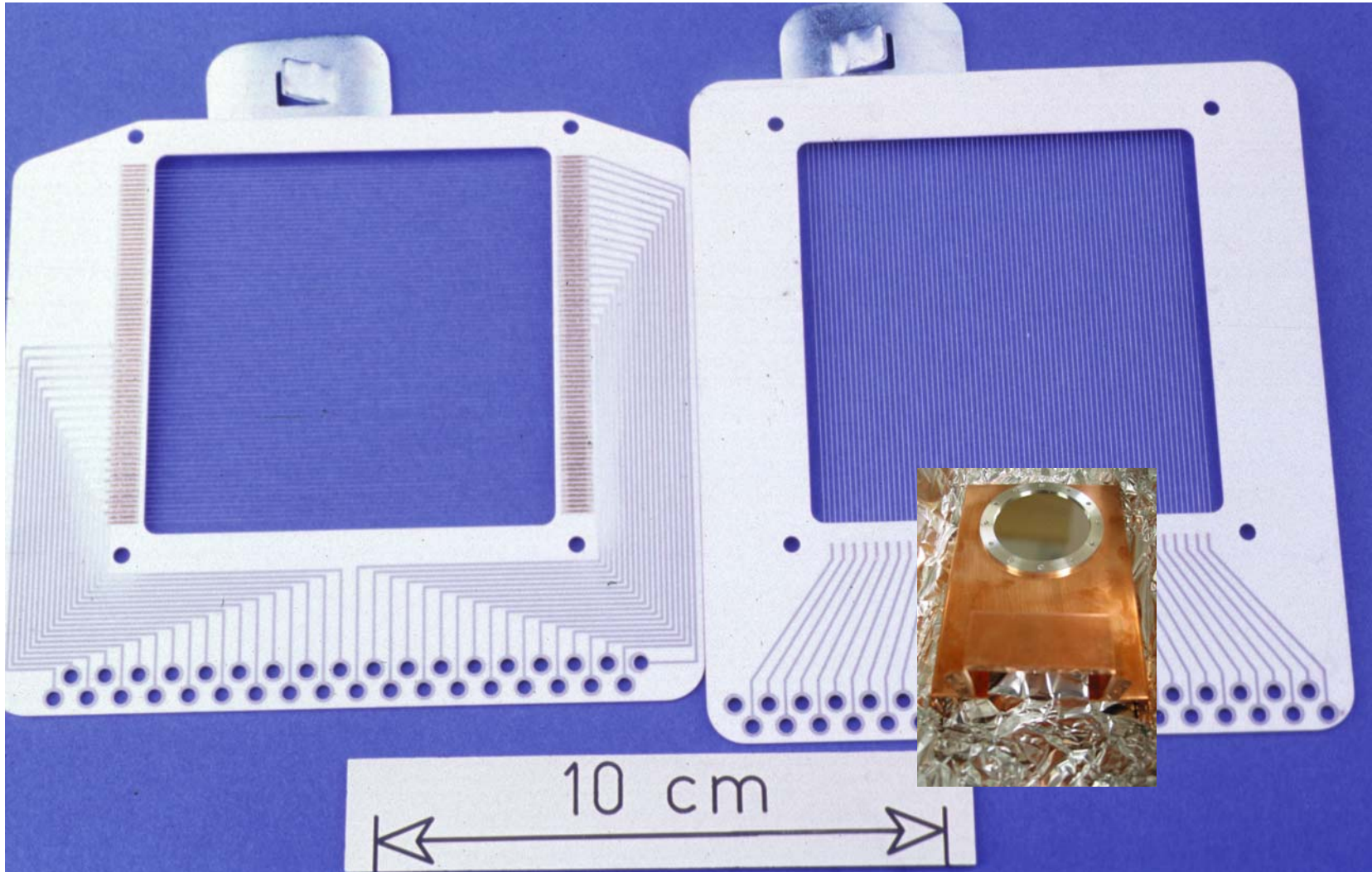


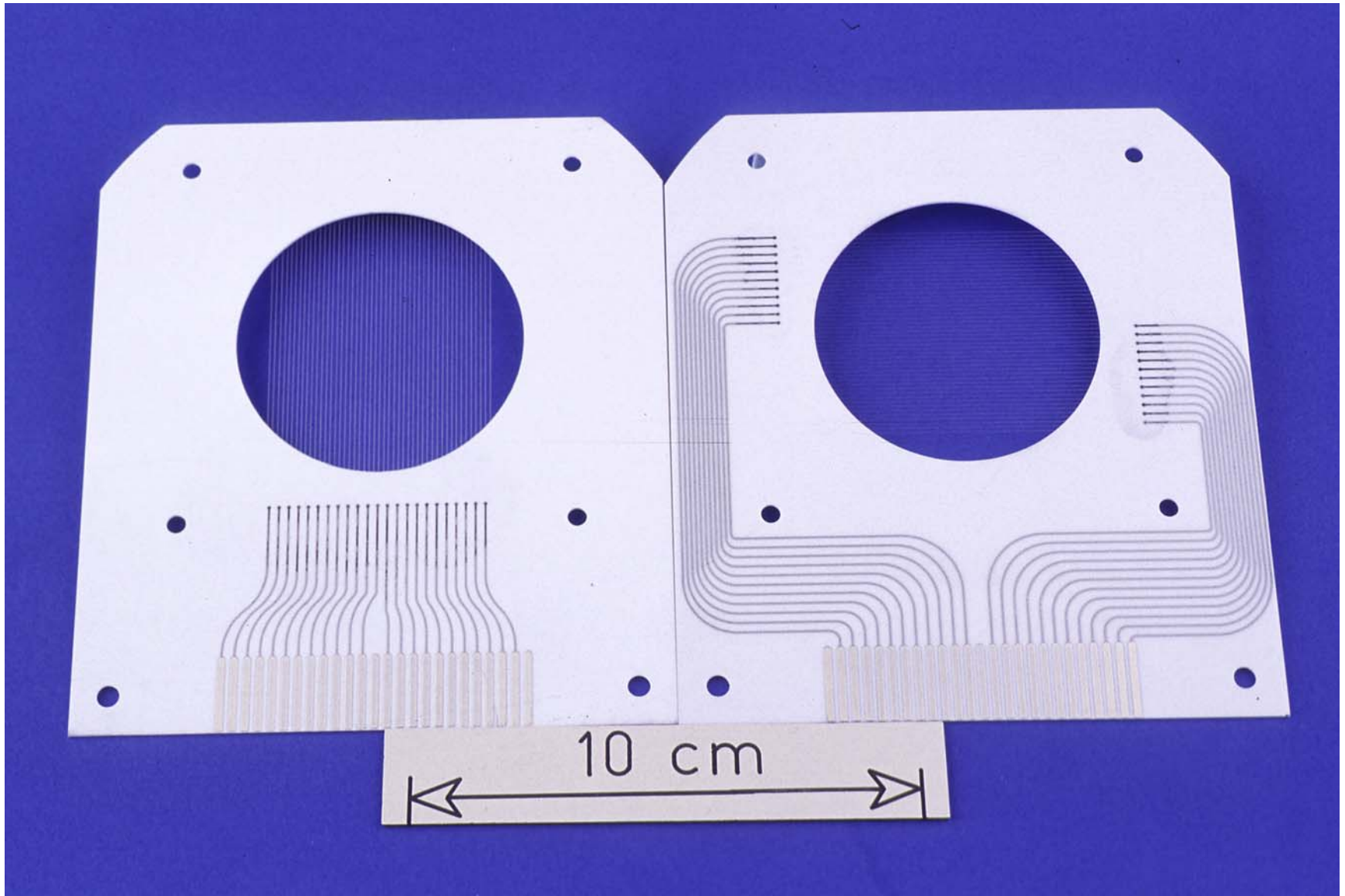


“SEM-fils”

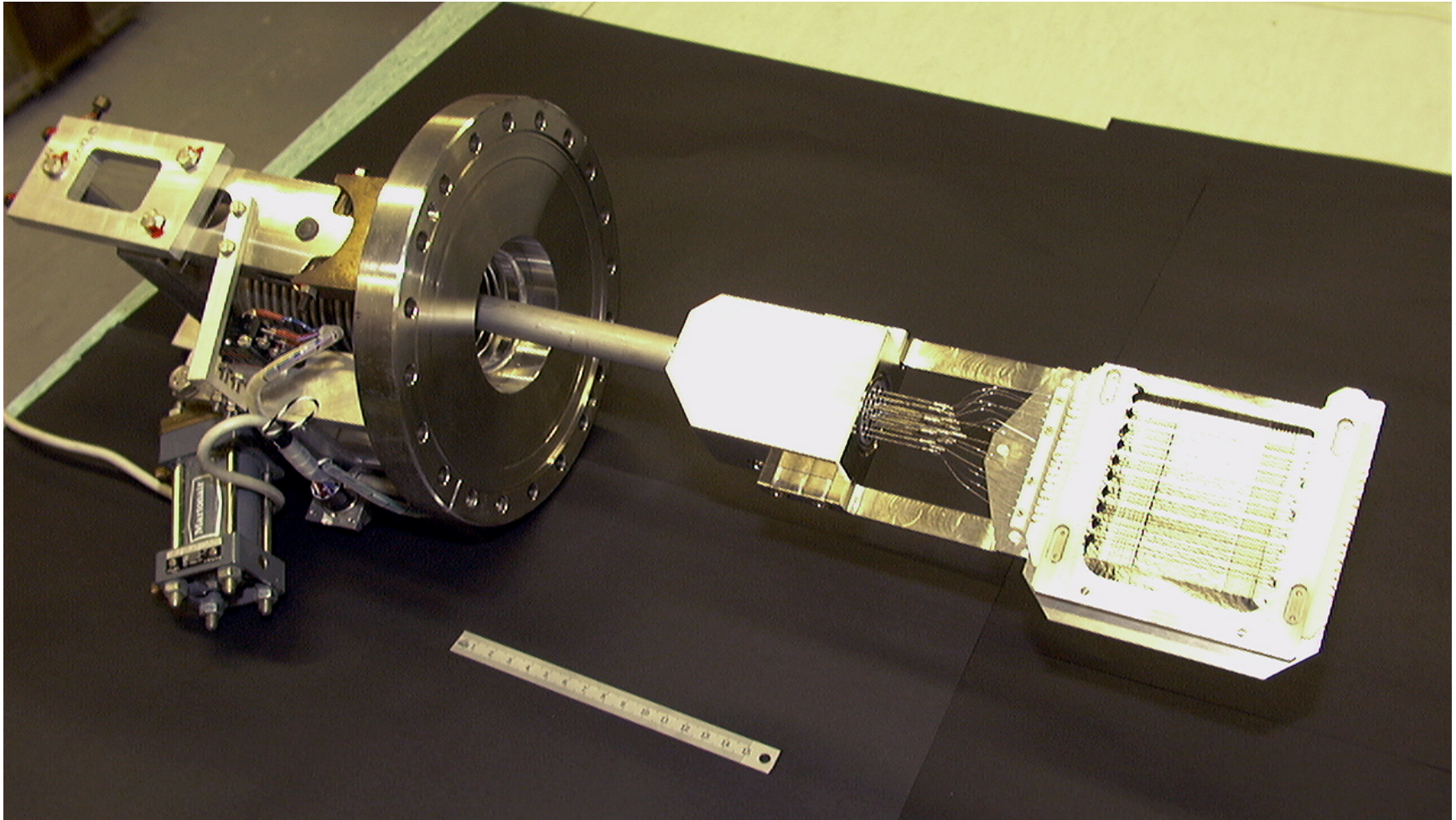


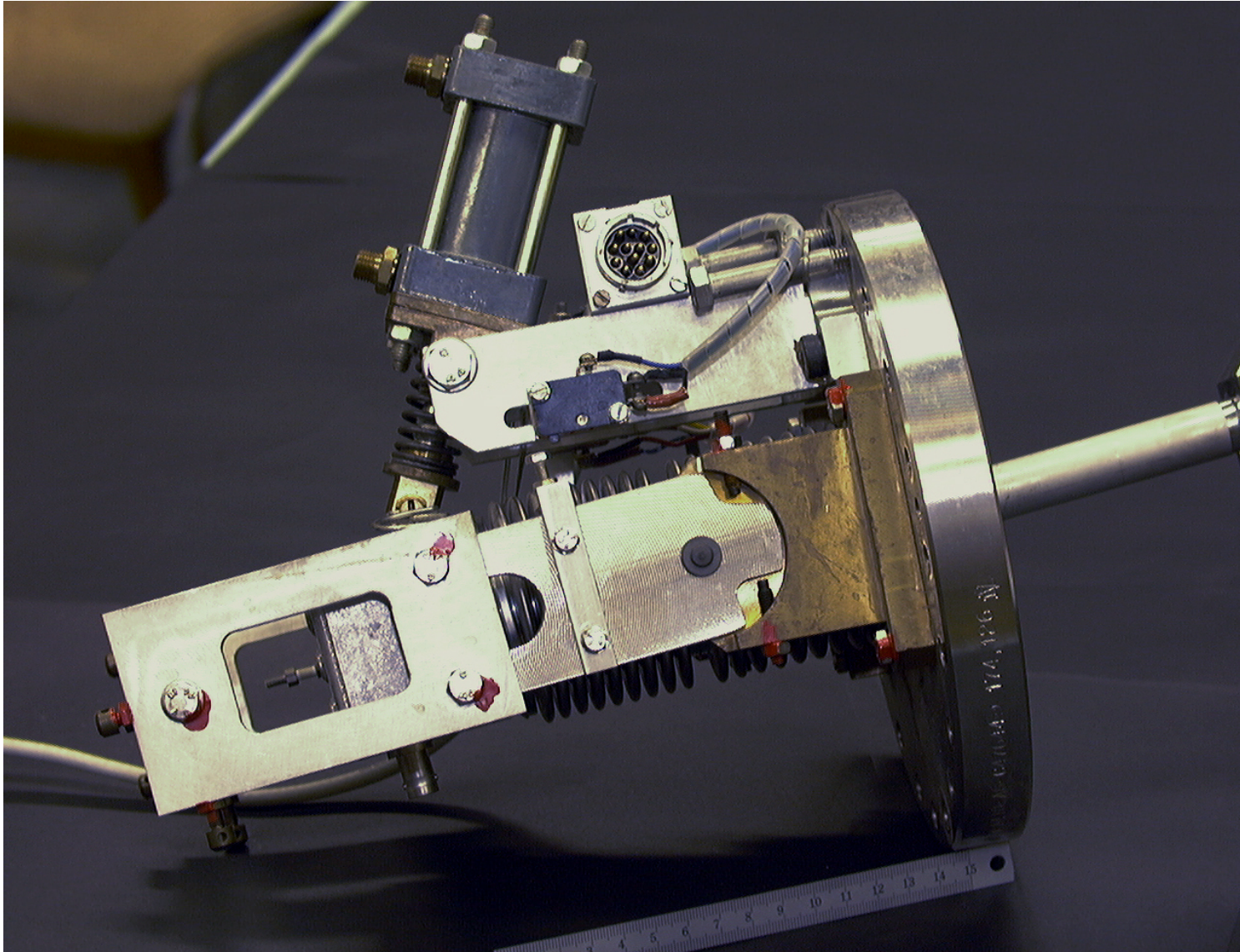




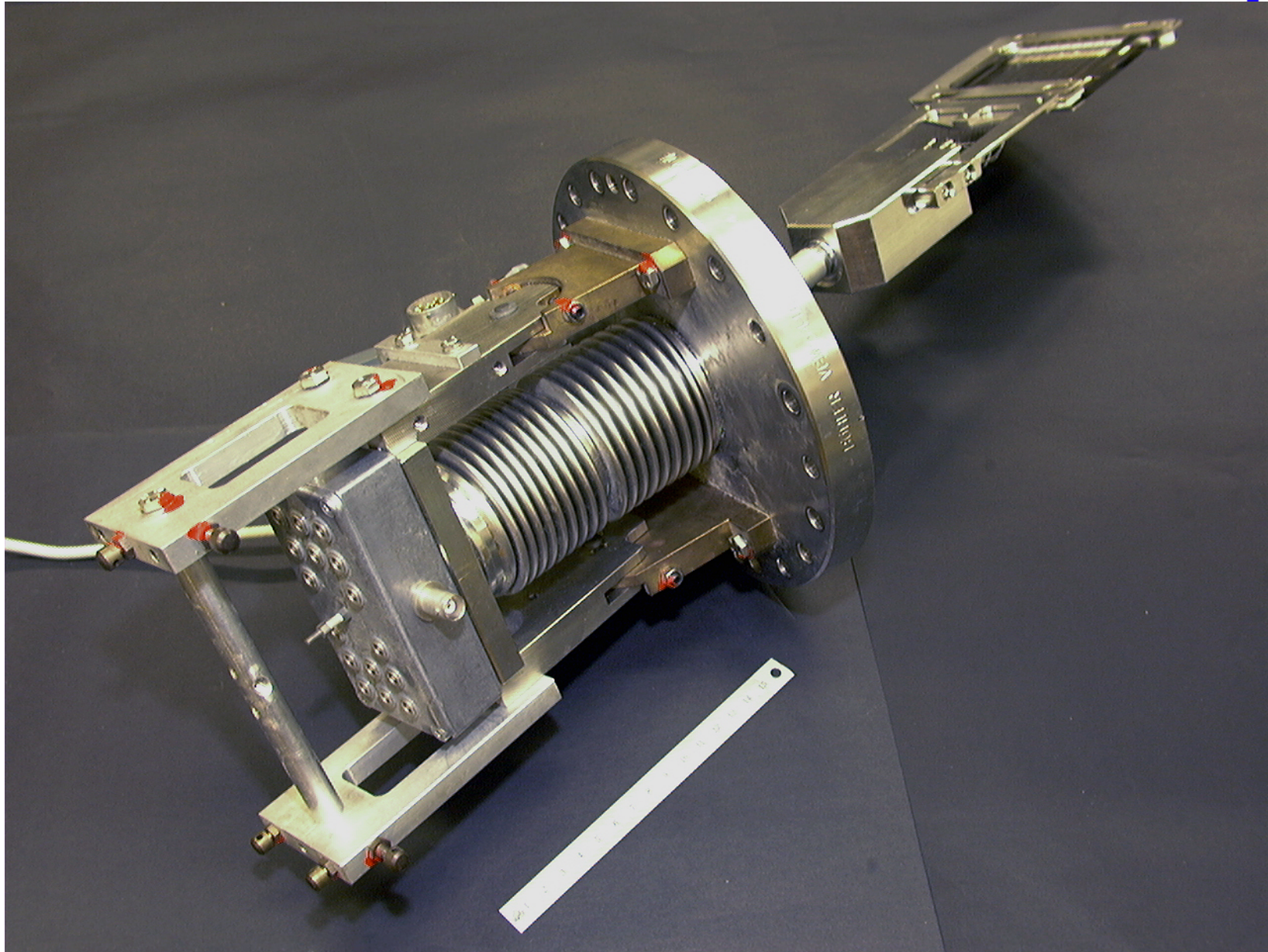


With in/out movement

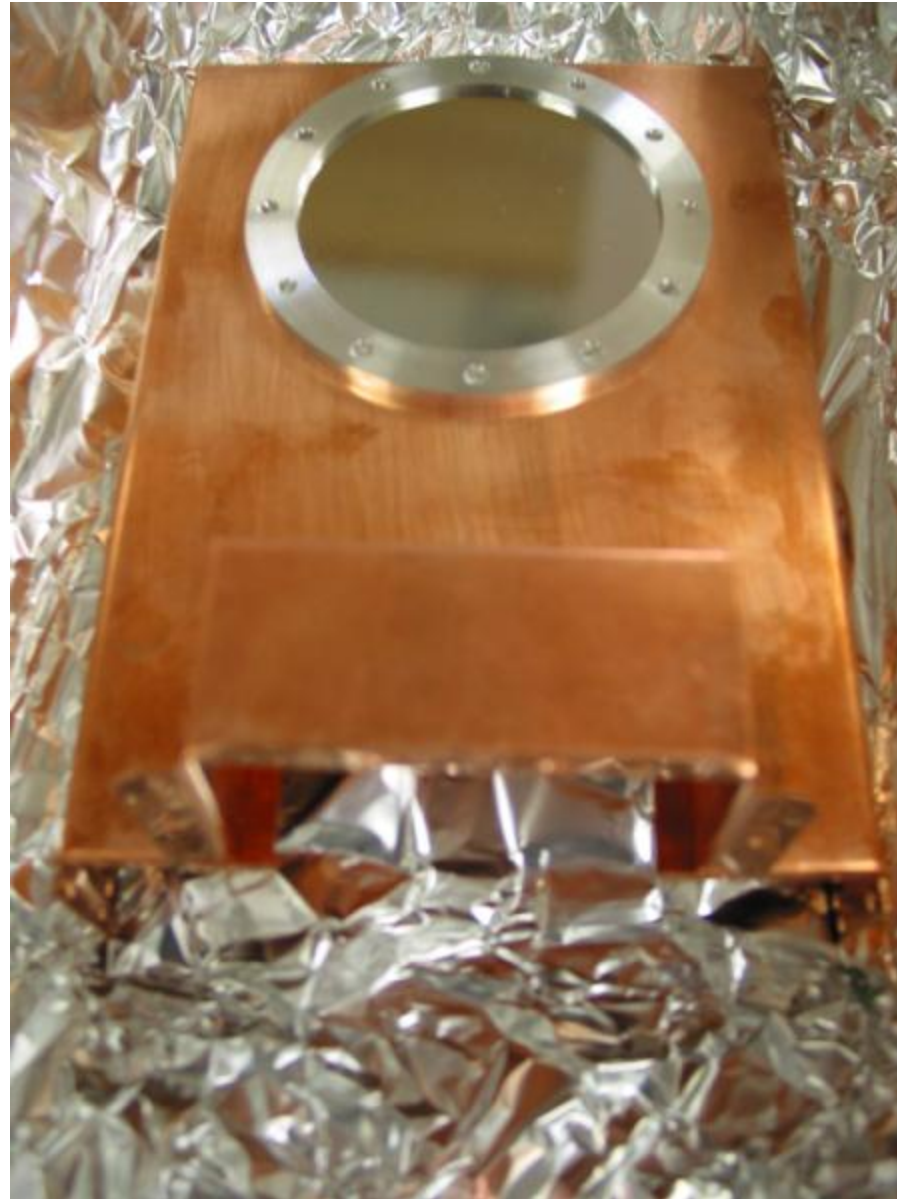




With in/out movement



Shielding





Specifications:

50 micro m diameter W

Sensitivity: $10e7$ to $10e13$ protons / pulse integrated over one turn (1 bunch to several)

Integration time \gg one turn

Price: 40 to 50 kCHF for existing step size (0.5 mm)
(16 to 32 channels)
(If lower step wanted: can be mounted with an angle)
No movement



Width 80 mm aperture

Fixed installation

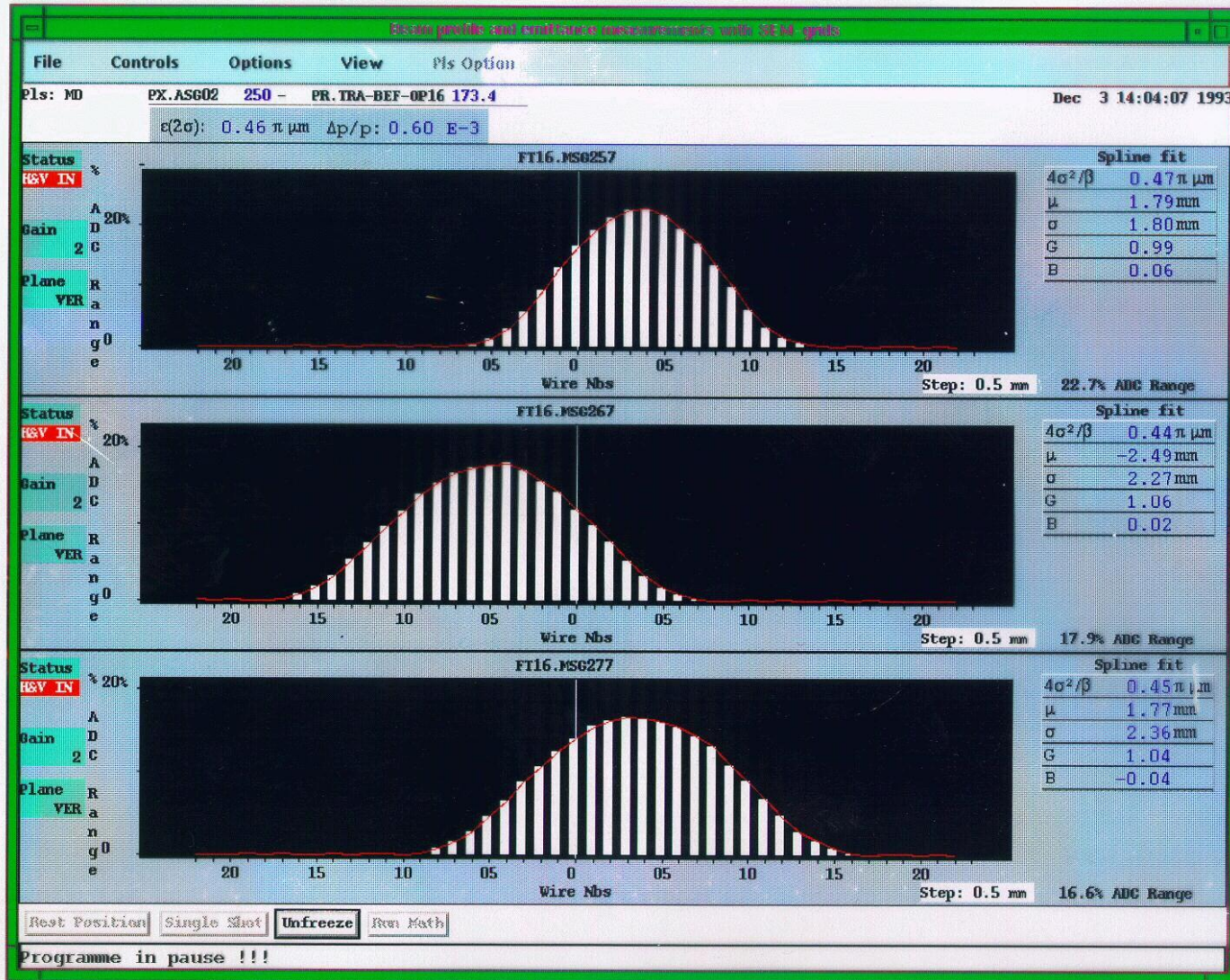
Could be borrowed (?) for 2 x 32 channels

No Hg wanted!

+ 20 kCHF if movement needed (in/out)

Every 0.5 mm one amplifier/integrator:
160 channels: expensive!

Signal output



An aerial photograph of a vast, snow-covered mountain range. The terrain is characterized by rolling, snow-draped peaks and deep, shadowed valleys. The snow is bright white, contrasting with the deep blue shadows cast by the mountain ridges. The overall scene is serene and majestic. Overlaid on the lower right portion of the image is the text "Thank you" in a bold, orange, italicized sans-serif font.

Thank you