

Positronium measurement preparation

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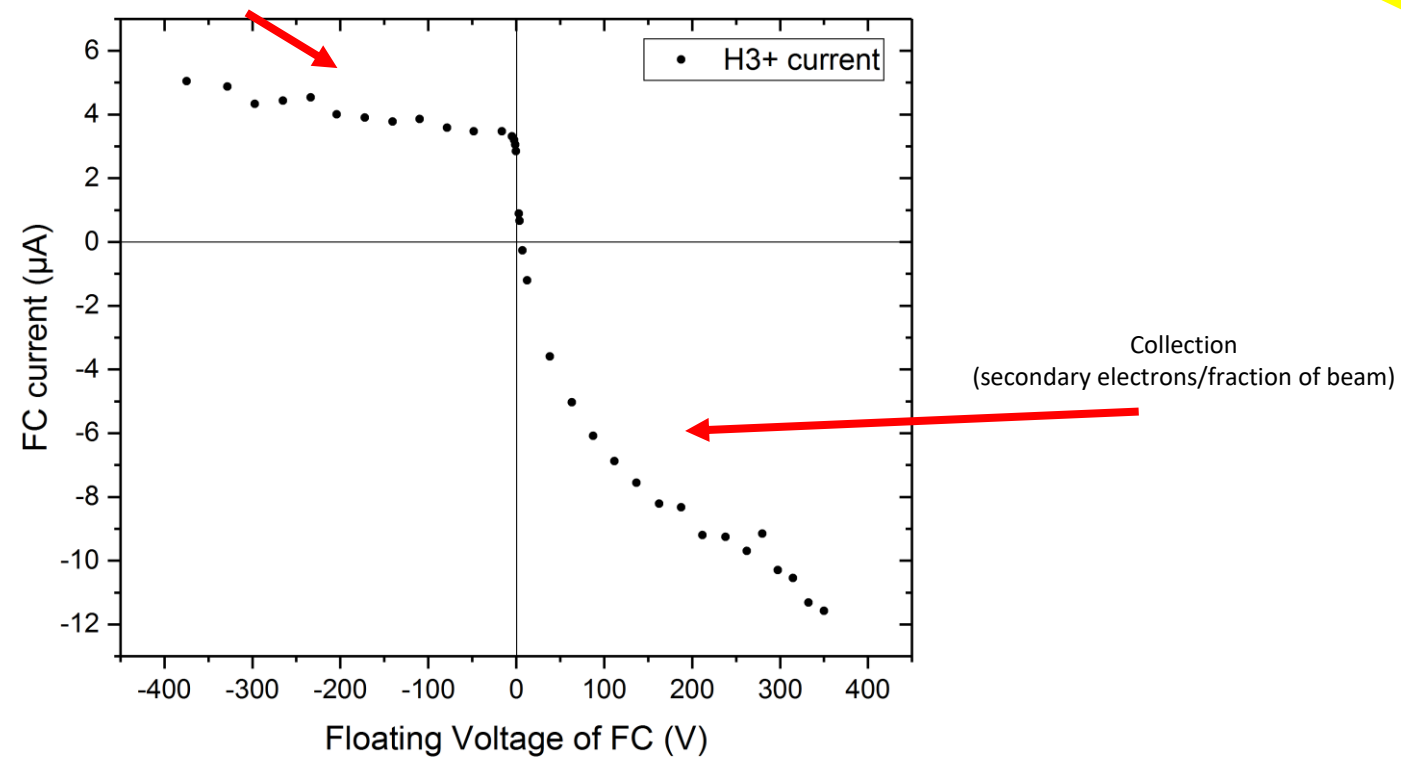
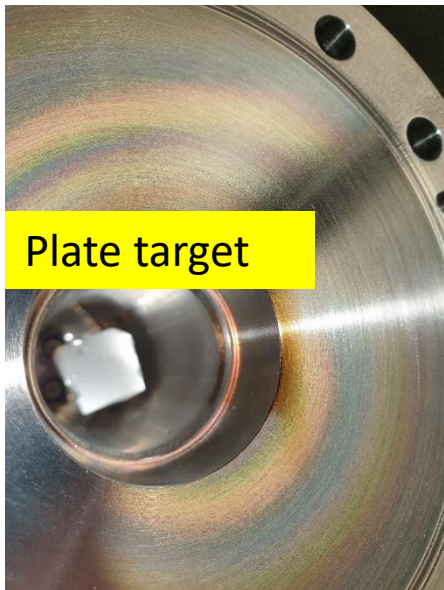
Proton gun values



From A.Welker's slide

FC (metal plate) current:

(repel secondary electrons/ collect fraction of beam / release of secondary electrons)



- Strange current behavior!

New Super FC

A long FC with a small opening:

Measure the currents to align the beam

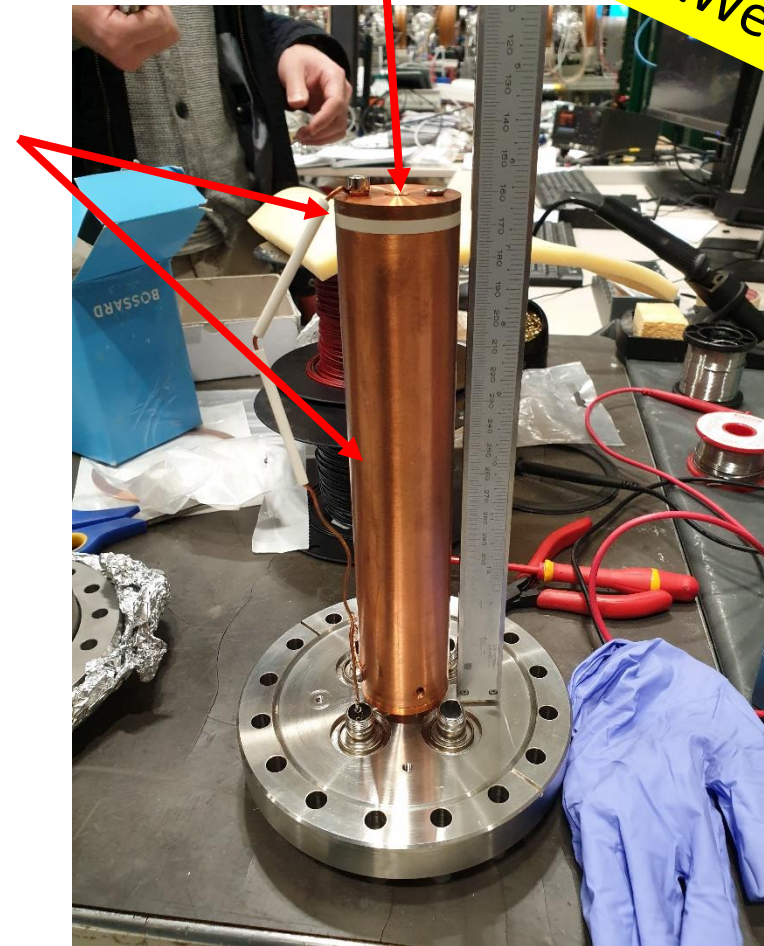
- Minimize the current on top
 - Maximize the current in the cup
- While aligning the proton gun

Bellow is installed to adjust proton gun direction



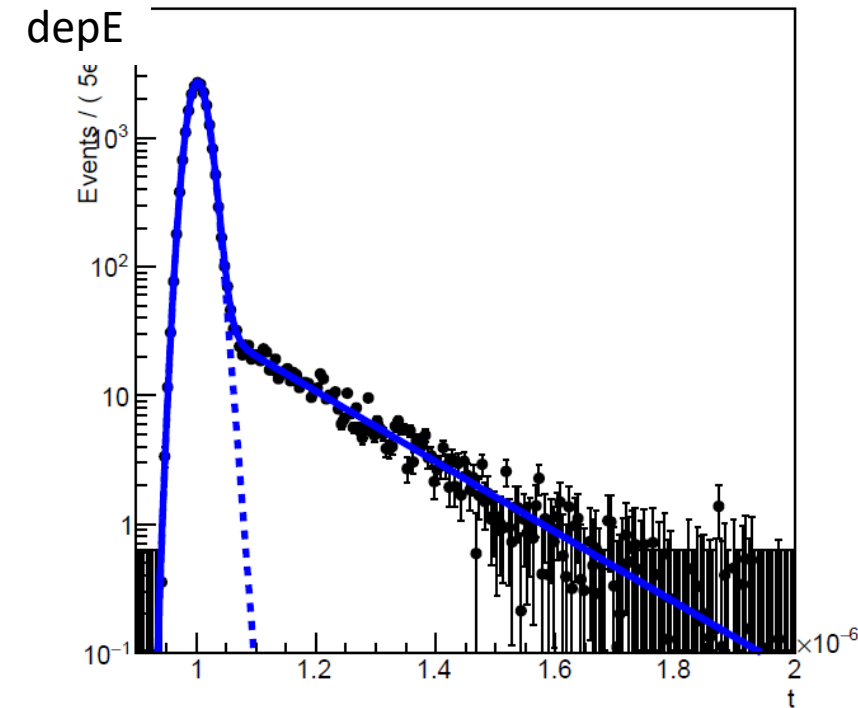
From A. Welker's slide

7 mm opening

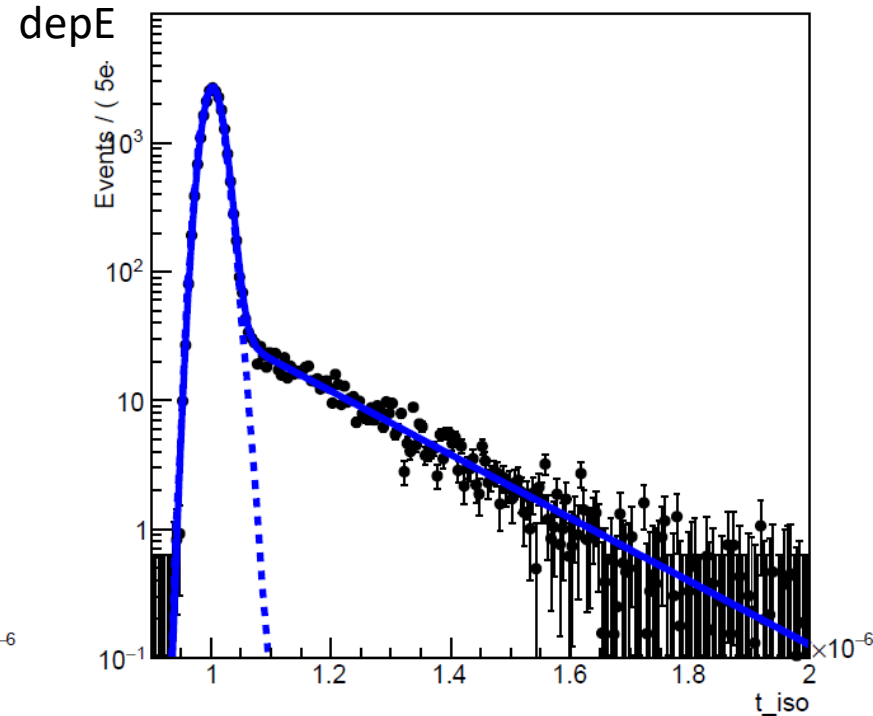


Positronium simulation fitting

A RooPlot of "t"



A RooPlot of "t_iso"



- Error : $\Delta E/E = 0.1$
 - Fitting : $\text{gaus}(x) \exp + \text{gaus}(x) \exp$
- Tau : 1.59 ± 0.06
- Tua(iso) : 1.76 ± 0.06
- Chisquare : too high...
 - Need to study more