

ALEGRO "Megatables".

In order to progress towards a collider, I would suggest three columns for each technology

Example here for e- e- acceleration:

Where are we, with experiments?

Where can we go, with experiments, with the ideal test facility?
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What can we do in simulation?

Where do we need to go, for a collider with energy XX, luminosity YY, assuming overall layout/parameters ZZ?

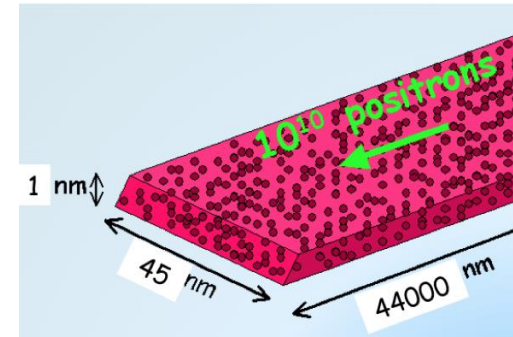
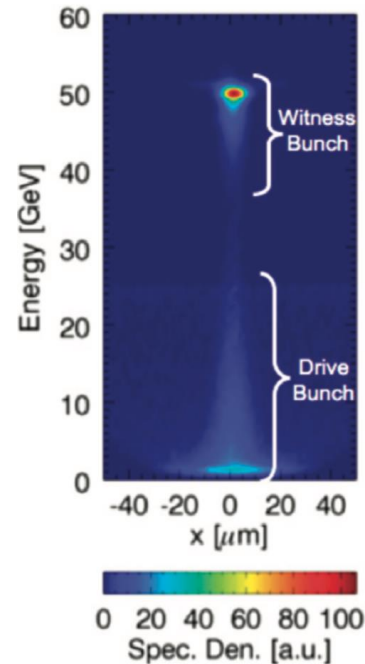
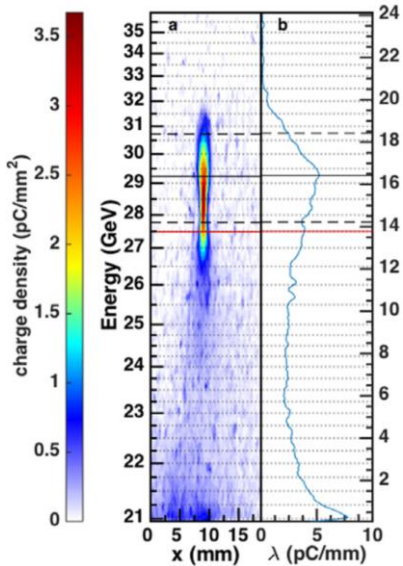
Parallel effort:

What are interesting XX, ZZ?

Are the assumptions ZZ the optimal ones?

Update collider layout

Define ideal experiments and test facilities



Requirements on :
efficiency
emittance
energy spread
and so on.

From 20 GeV to 29 GeV in 1.3 m.
Wake to beam efficiency ~ 30 %.
M. Litos et al., PPCF, **58** 034017 (2016)

25 GeV e- e- energy doubling in 1 m.
Total efficiency >= 50 %.
M. Hogan et al., New J. Phys. **12** 055030 (2010)