

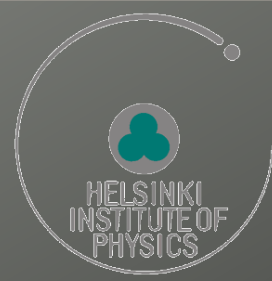
Central Exclusive Production and TOTEM Timing Detectors

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Supervisor: Kenneth Österberg

PAPU meeting + Christmas dinner
2nd December 2015,
Helsinki, Finland



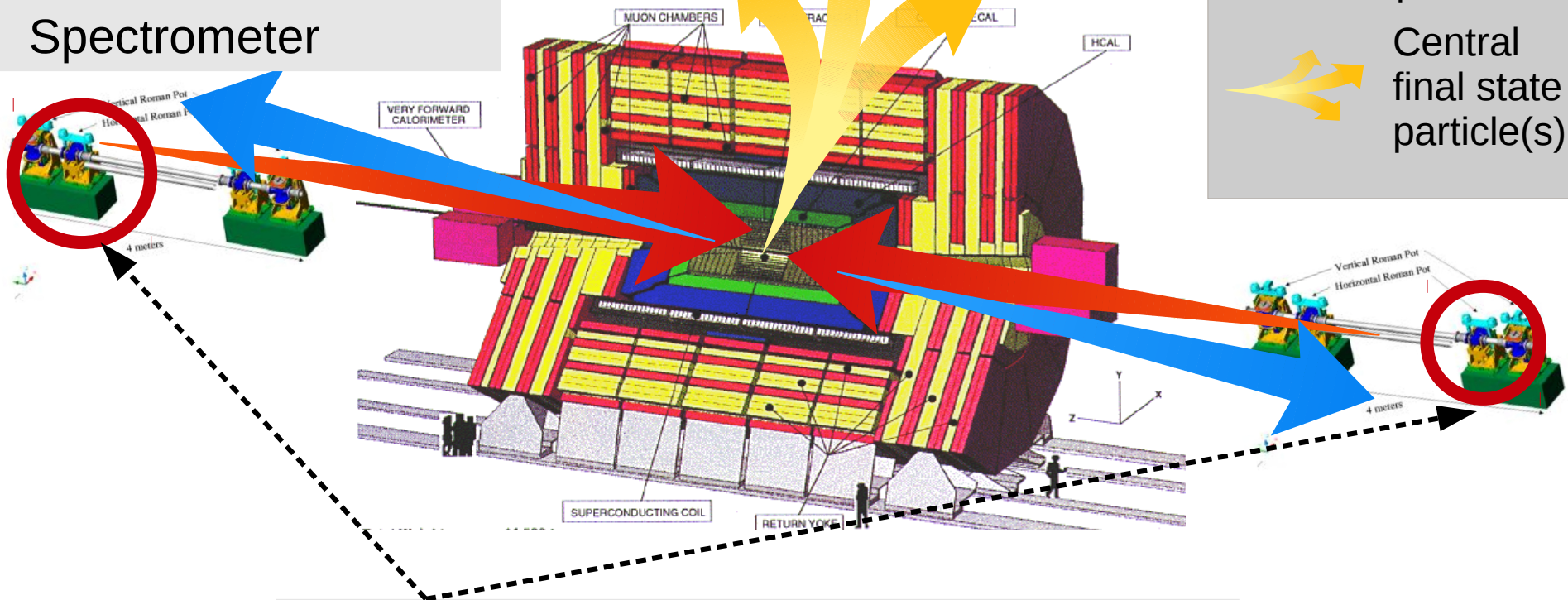
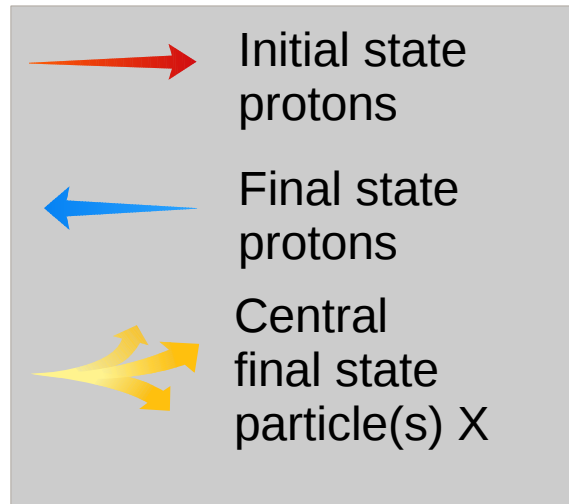
Central Exclusive Production



Upgrade project to study CEP:

CT-PPS

= CMS-TOTEM Precision Proton Spectrometer



Time of Flight detectors $\rightarrow t_1 - t_2 \sim z$ -vertex
Tracker \rightarrow momentum

- Collision area:
30cm ~ 1 ns
- TOTEM's choice: **Diamond**
 - 4 layers → 40 ... 50 ps resolution
(Si: 40 ... 95 ps)
- Current contribution:
 - Participation in beam tests
 - Participation in installation work
 - Test set-up built at Detector Laboratory in Helsinki



Silicon
~ 200 strips

