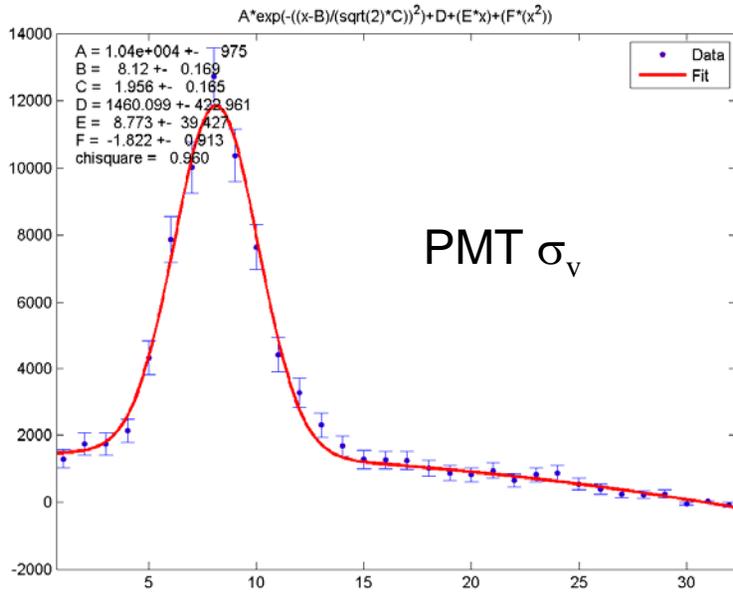
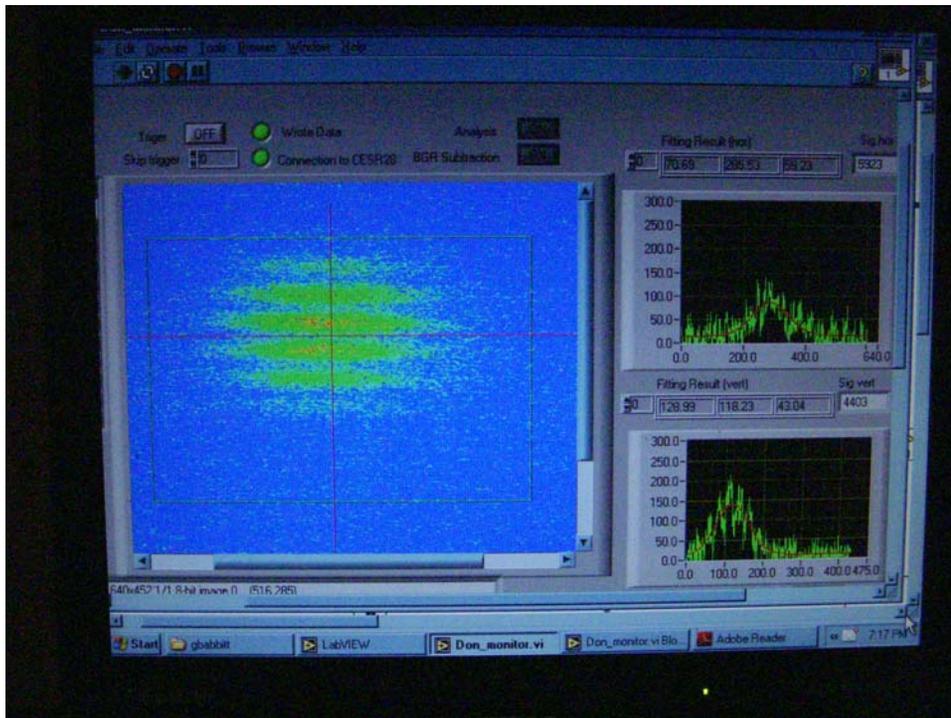
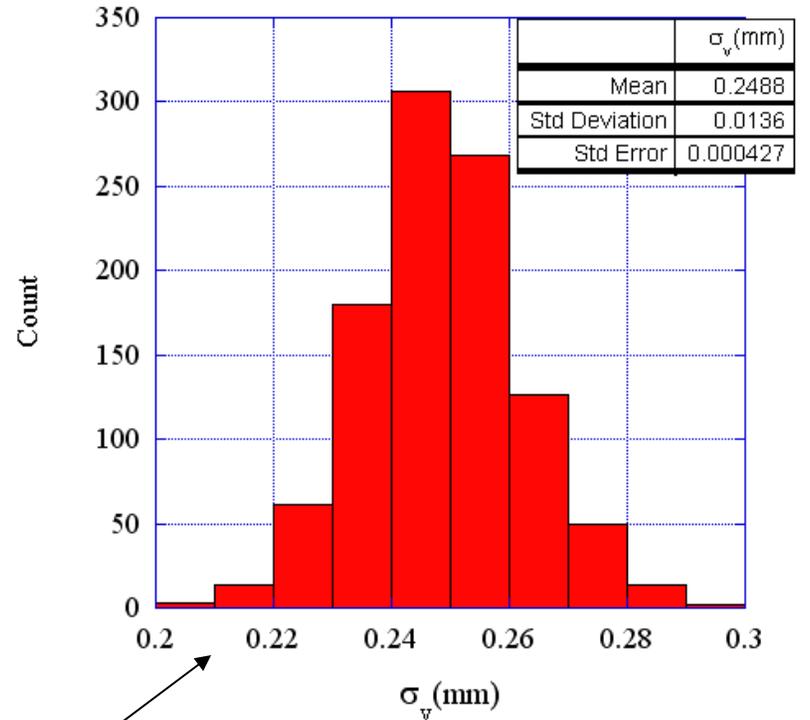


e+ PMT/Interferometer Comparison

Single bunch of e+ with I=2.3mA. Measured σ_v with PMT and Interferometer.



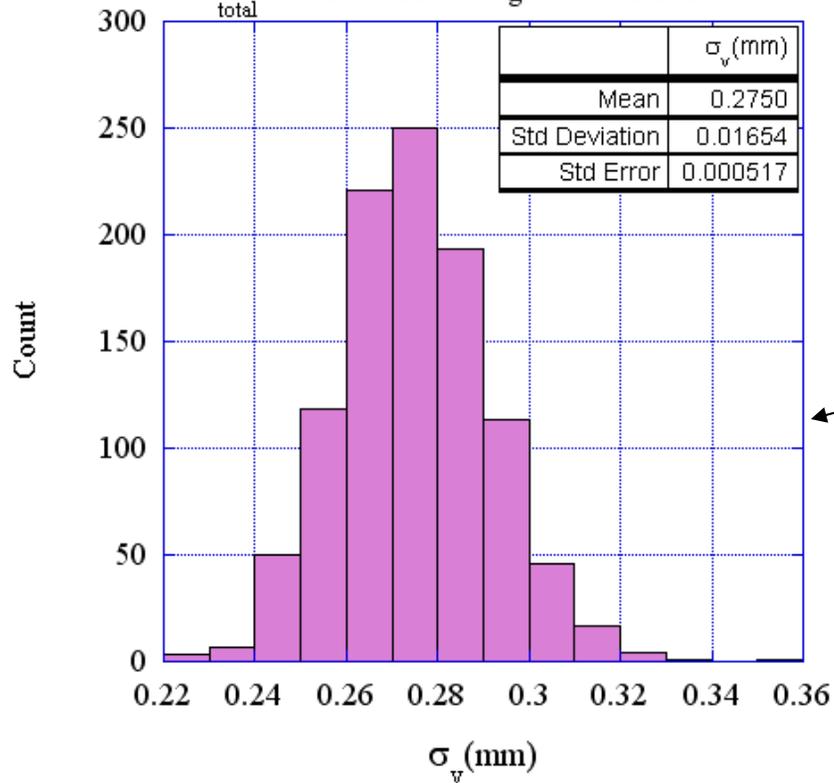
CESR-c Single Bunch e+ I=2.3mA PMT Voltage=400V File:1931



- Average $\sigma_v=206\mu\text{m}$ from e+ PMT (with σ_v resolution = $140\mu\text{m}$ correction).
- Average $\sigma_v\sim 200\mu\text{m}$ from e+ interferometer

Good Agreement!

e+ Bunch 1 Train 1 with 25 bunches in CESR-c
I_{total} ~75mA PMT Voltage=375V File:1947

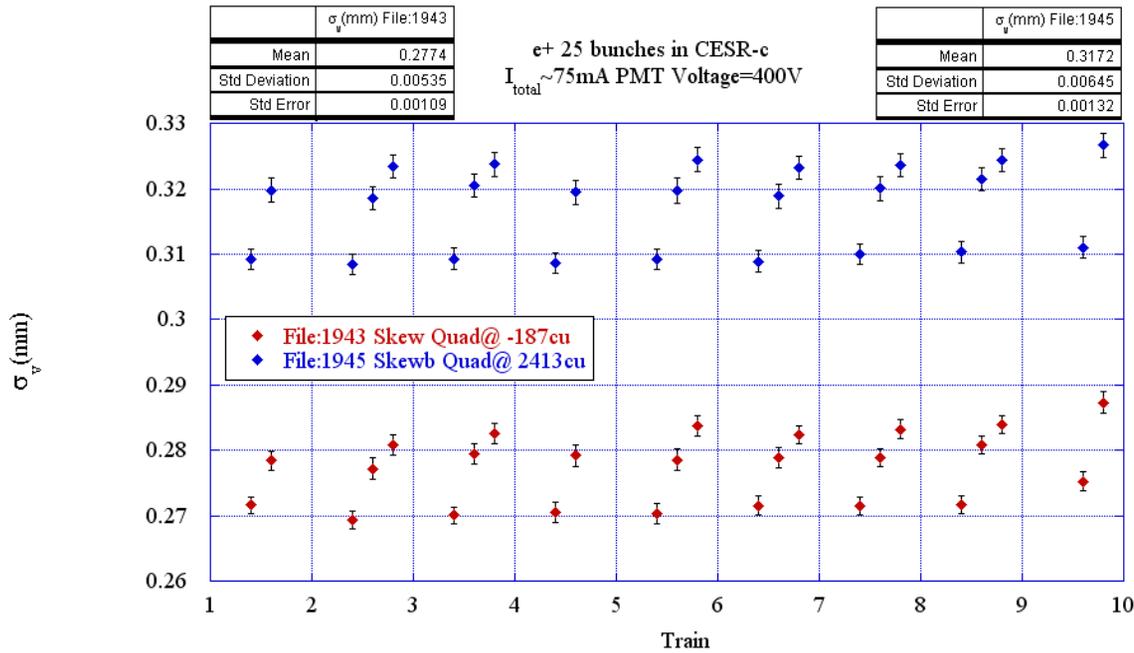


Single bunch (train 1, bunch 1) of e+ with 26 bunches present in CESR with I~3mA/bunch. Measured σ_v with PMT and Interferometer.

Average $\sigma_v=237\mu\text{m}$ from e+ PMT (with σ_v resolution =140 μm correction).

Average $\sigma_v\sim 200\mu\text{m}$ from e+ interferometer

PMT beam size increased with 26 present whereas the interferometer beam size stayed the same.



25 bunches of e+ in CESR with I~3mA/bunch.

Measured σ_v with PMT and Interferometer with normal CESR-c conditions (skq@-187cu) and induced beam size blow-up (skq@2413cu).

Average $\sigma_v=239\mu\text{m}$ (skq@-187),
 $\sigma_v=284\mu\text{m}$ (skq@2113) from e+ PMT
(with σ_v resolution=140 μm correction).

Average $\sigma_v=200\mu\text{m}$ (skq@-187),
 $\sigma_v=230-240\mu\text{m}$ (skq@2113) from e+ interferometer

20% beam size blow-up was measured with PMT and Interferometer.

