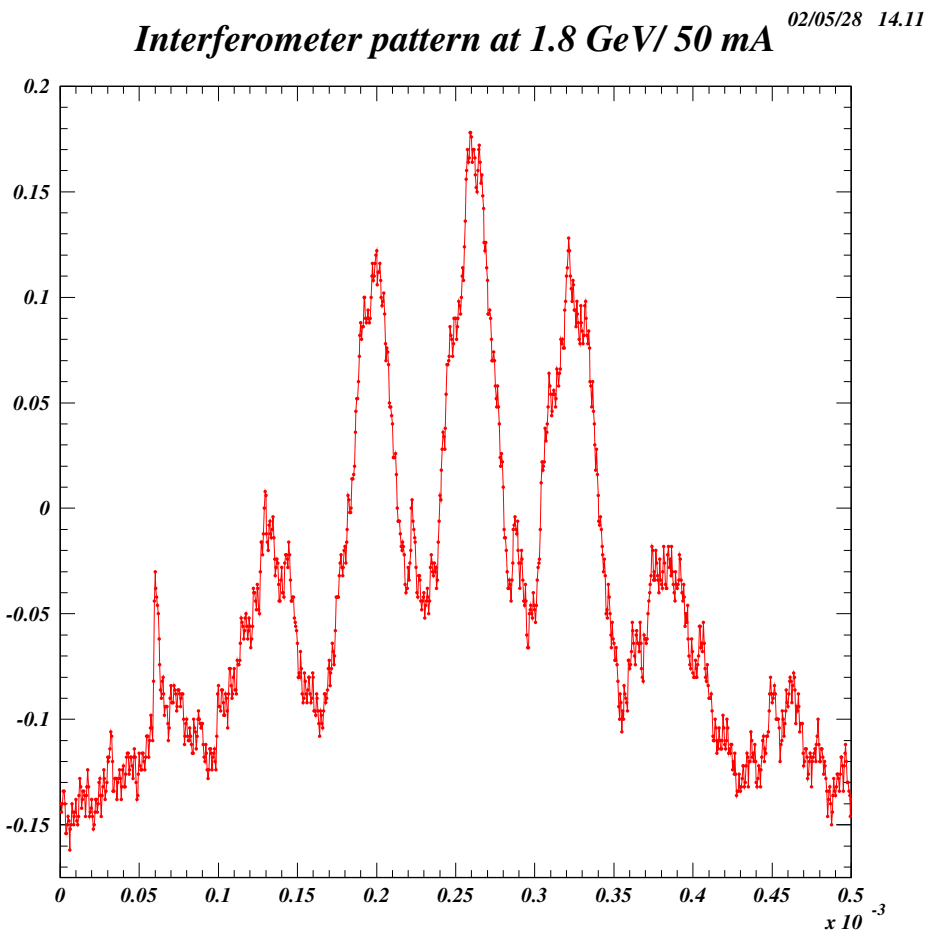
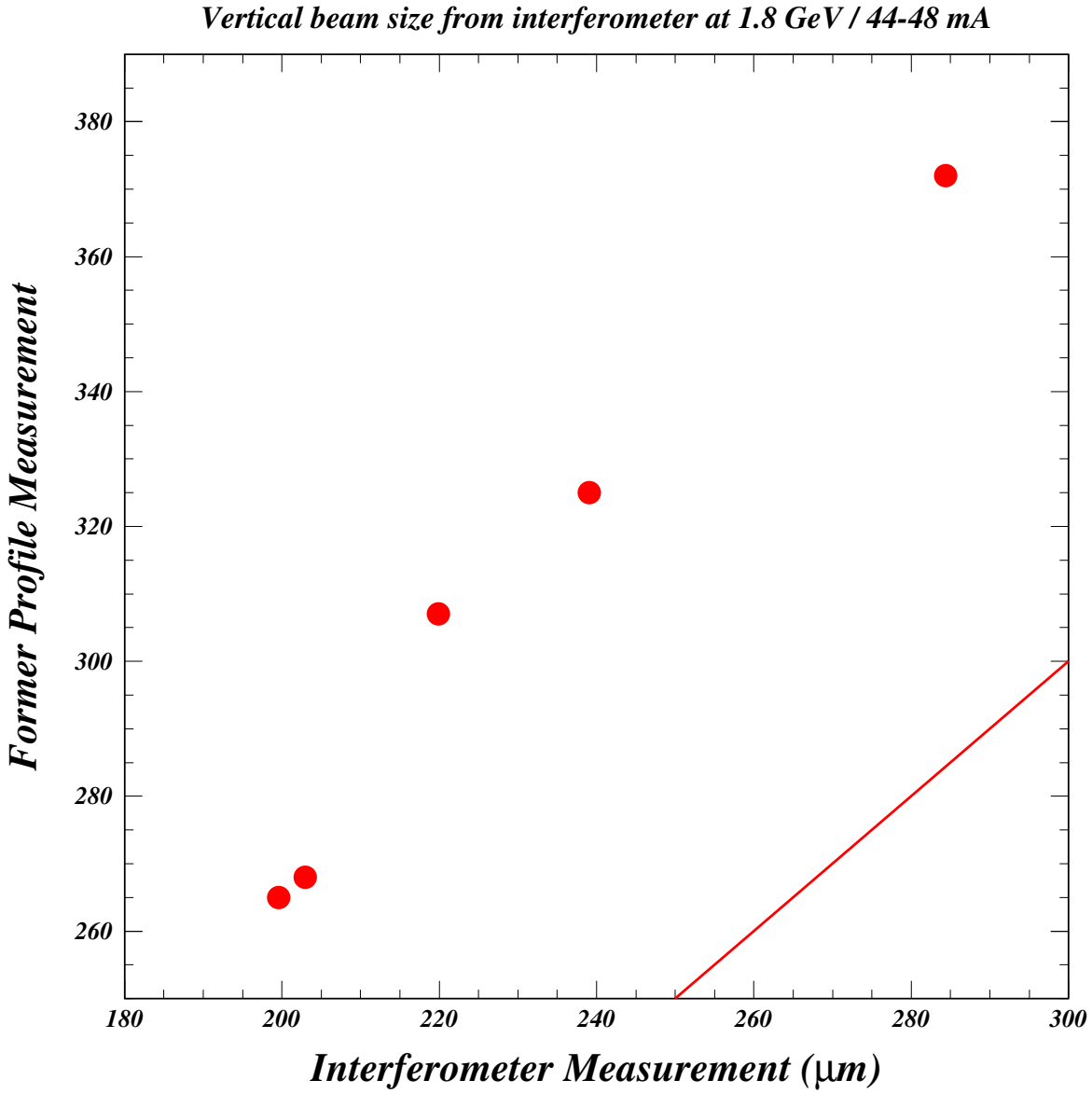
Interferometer Measurements of Vertical Beam Size at 1.8 GeV



$$\sigma_V = \frac{\lambda}{\pi}\,\frac{R}{D}\,\sqrt{\frac{1}{2}\log\left(\frac{1}{\nu}\right)}$$

Visibility $\nu \simeq \frac{V_{\max}-V_{\min}}{V_{\max}+V_{\min}}$ Wavelenth $\lambda = 500$ nm

Slit width $D = 2$ mm Distance Grid to Pattern $R = 5$ m

Interferometer Measurements Compared to Present Beam Profile Measurement

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