3770_2p4_20061116_1513: Electron Twiss and Dispersion (BBI on, PRETZEL on)

\[ \beta_x (m) \]

\[ \alpha_x \]

\[ \eta_x (m) \]
3770_2p4_20061116_1513: Pretzel and Pulsed-Bump Displacements for Electrons

\[ \Delta x (cm) \]

\[ s (m) \]

\[ \Delta x (cm) \]

\[ s (m) \]
Aperture Limits and Horizontal Beam Sizes

<table>
<thead>
<tr>
<th>Aperture Limits</th>
<th>Horizontal Beam Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 s (m)</td>
<td>0.1 cm</td>
</tr>
<tr>
<td>1 s (m)</td>
<td>0.2 cm</td>
</tr>
<tr>
<td>2 s (m)</td>
<td>0.3 cm</td>
</tr>
<tr>
<td>3 s (m)</td>
<td>0.4 cm</td>
</tr>
<tr>
<td>4 s (m)</td>
<td>0.5 cm</td>
</tr>
<tr>
<td>5 s (m)</td>
<td>0.6 cm</td>
</tr>
<tr>
<td>6 s (m)</td>
<td>0.7 cm</td>
</tr>
<tr>
<td>7 s (m)</td>
<td>0.8 cm</td>
</tr>
</tbody>
</table>

**Aperture Limits**

- X (cm)
- Horizontal Beam Size

**Horizontal Beam Size**

- σx (cm)
- s (m)
Injected Beam

06/12/06 16.24

3770_2p4_20061116_1513: e+ Horizontal Clearance for Injected e- Beam

Δx (cm)

0 100 200 300 400 500 600 700

Δσ_x (Nr standard deviations)

0 100 200 300 400 500 600 700

s (m)
3770_2p4_20061116_1513: e+ Vertical Clearance for Injected e- Beam

Δy (cm)

0 100 200 300 400 500 600 700

s (m)

Δy/σ_y (Nr standard deviations)

0 100 200 300 400 500 600 700

s (m)
Contribution from beta function

Contribution from dispersion

Δx(cm)

Injected Beam

s (m)