45 $e^+$ bunches, 4-ns spacing, 0.9 mA/bunch

- 3.5 inch cylindrical v.c.
- 0.025 p.e./e
- 100% reflectivity
- $\delta_{max} = 2.0$
- $E_{peak} = 310\,\text{eV}$
- $I_b = 1.44\times10^{10}\, e^+/\text{bunch} (0.9\,\text{mA})$

Resonance more clear with cylindrical vacuum chamber.
Slight offset from $n=10$. 
Compare $n=0.5$ with $n=1.0$

$n=0.5$

$n=1.0$

Peaks at top and bottom of chamber more spread out on resonance. Corresponds to bigger effect for collector 1 than collector 9.
Compare \( n=0.5 \) with \( n=1.0 \)

\( n=0.5 \)

\[ x \times 10^6 \]

\[ x \times 10^5 \]

\( n=1.0 \)

Again showing more spread in azimuth on resonance.
Compare \( n=0.5 \) with \( n=1.0 \)

\[ n=0.5 \]

\[ n=1.0 \]

**Job 1599: Time-Integrated Energies of Electrons Hitting Wall**

- Entries: 501
- Mean: 19.83
- RMS: 55.79

**Job 1601: Time-Integrated Energies of Electrons Hitting Wall**

- Entries: 501
- Mean: 33.28
- RMS: 62.44

Higher energies on resonance, but need to correlate to position on wall.
Compare $n=0.5$ with $n=1.0$

$n=0.5$

Job 1599: Electron Energies (eV) Averaged Over 360 ns

$n=1.0$

Job 1601: Electron Energies (eV) Averaged Over 360 ns

Spatial distribution of cloud electron average energies.
Compare n=0.5 with n=1.0

Angles of incidence on wall more glancing on resonance. Consequences for RFA acceptance. More secondary yield in any case.
Compare $n=0.5$ with $n=1.0$

$\text{Higher yields on resonance.}$

$\text{Higher energies and more grazing angles.}$

ECLOUD SEY model sets $\cos \Theta < 0.2$ to $\cos \Theta = 0.2$ for yield calculation.