Questions on DFS in ML

20080318

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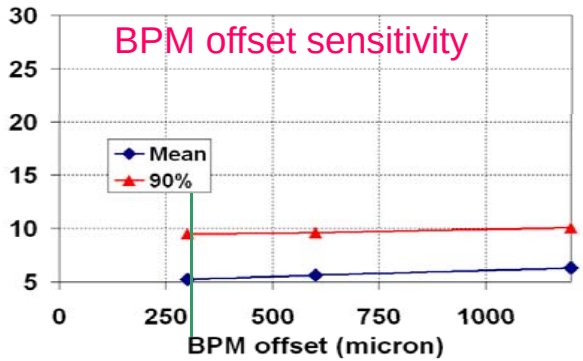
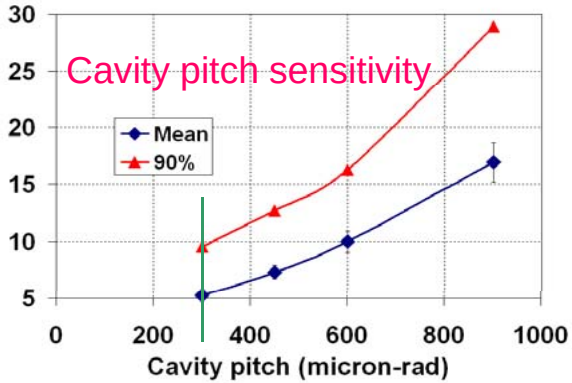
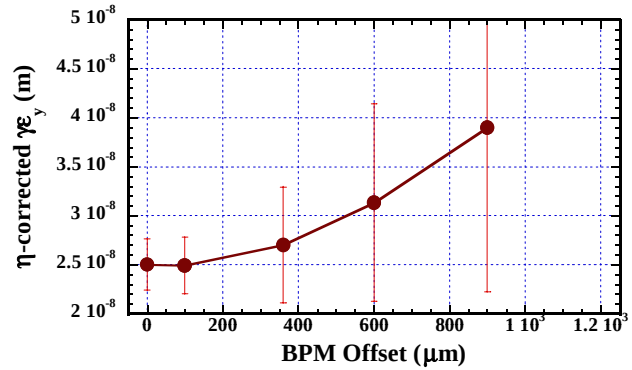
Emittance after DFS in ML vs. BPM offset and Cavity tilt

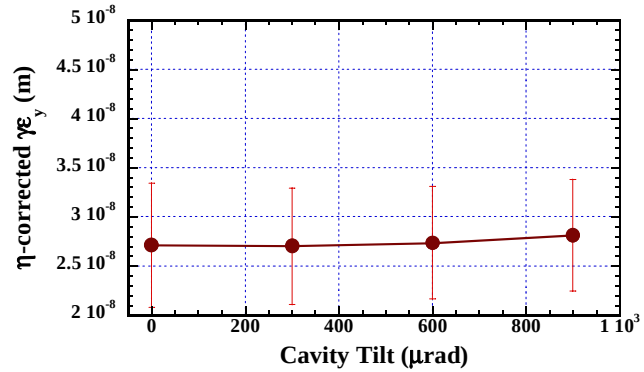
By K.Ranjan





This work



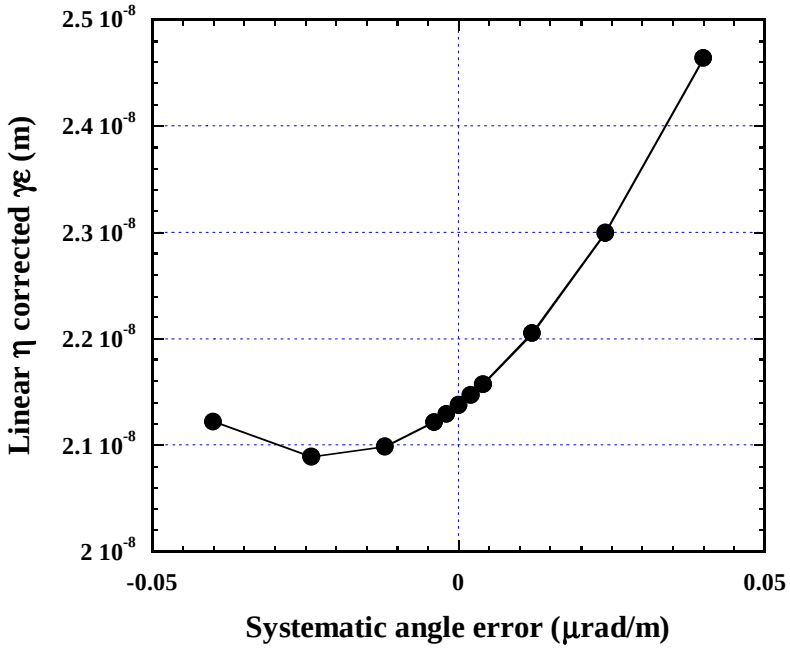


By K.K. LET Workshop at SLAC, Dec. 2007

Which is correct ?

From different algorithms or different parameters?

DFS in ML with error of vertical curvature



Minimum at non-zero error:
from error of estimated dispersion
(error of target dispersion).

Earth's curvature = 0.16 μrad/m
~15 % of the Earth's curvature
(~25 nrad/m)
causes 5% emittance growth

Really so sensitive ?
25 nrad/m sounds very small ?

Can anybody check DFS in ML?

Sensitivity to

- BPM offset
- Cavity tilt
- Error of vertical curvature