

# Crab Cavity Energy Kick

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## Current Fellow Agenda

- Help implementing & debug solenoid code from Barbara into placet head.
- Evaluate possible new IR configurations
- Tuning of final focus in the presence of crab cavities and solenoids.

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- First task: Implement 6-dimensional crab cavity kick

Angular cc kick:

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$$\Delta p_z = -\frac{\partial H}{\partial z}$$

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$$\Delta p_z = -\frac{\partial H}{\partial z}$$

Which gives us:

$$\Delta p_z = \frac{qV}{E} \cos\left(\phi + \frac{2\pi}{\lambda} z\right) \frac{2\pi}{\lambda} x$$



