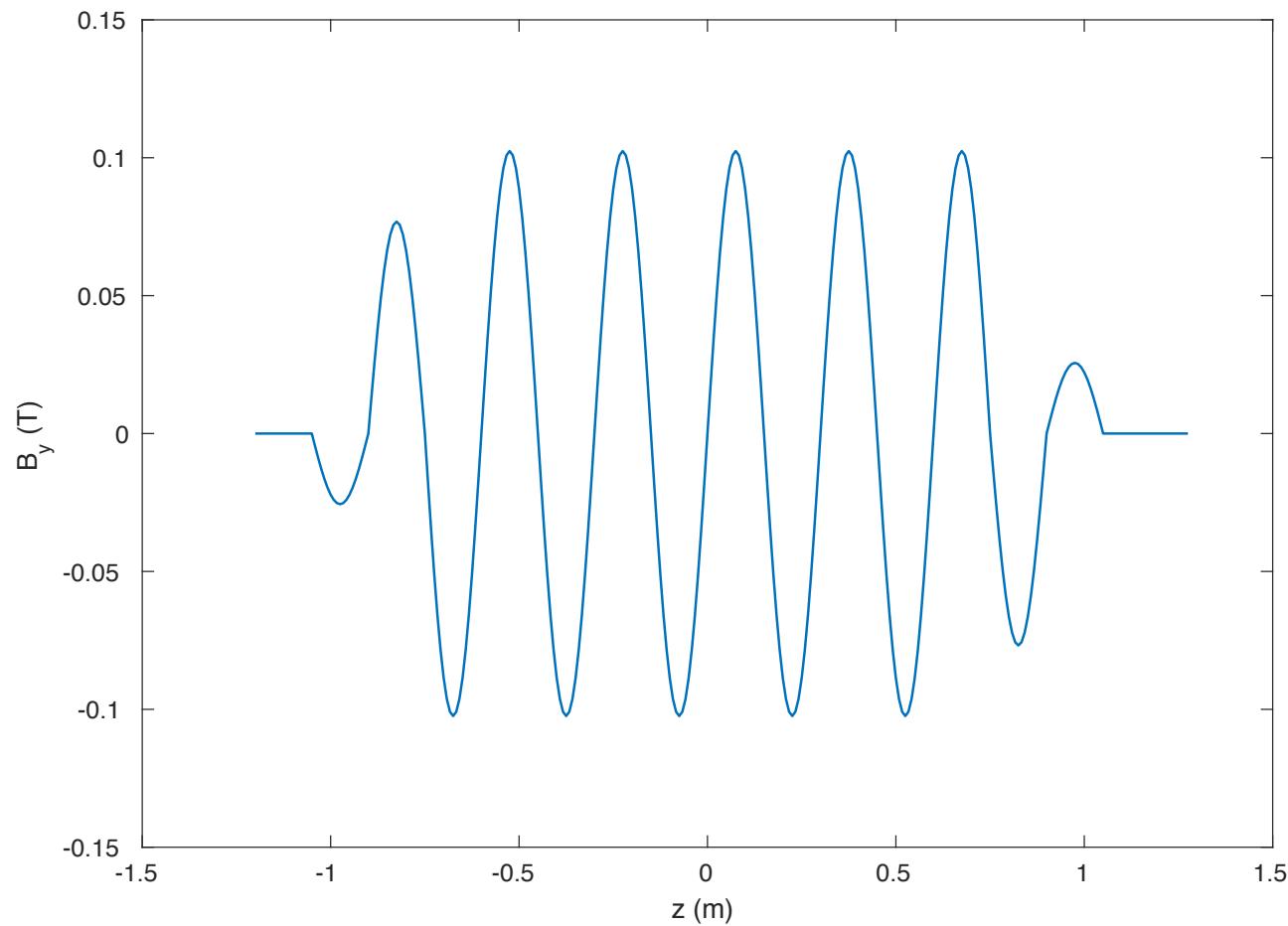


# pick up undulator radiation pattern

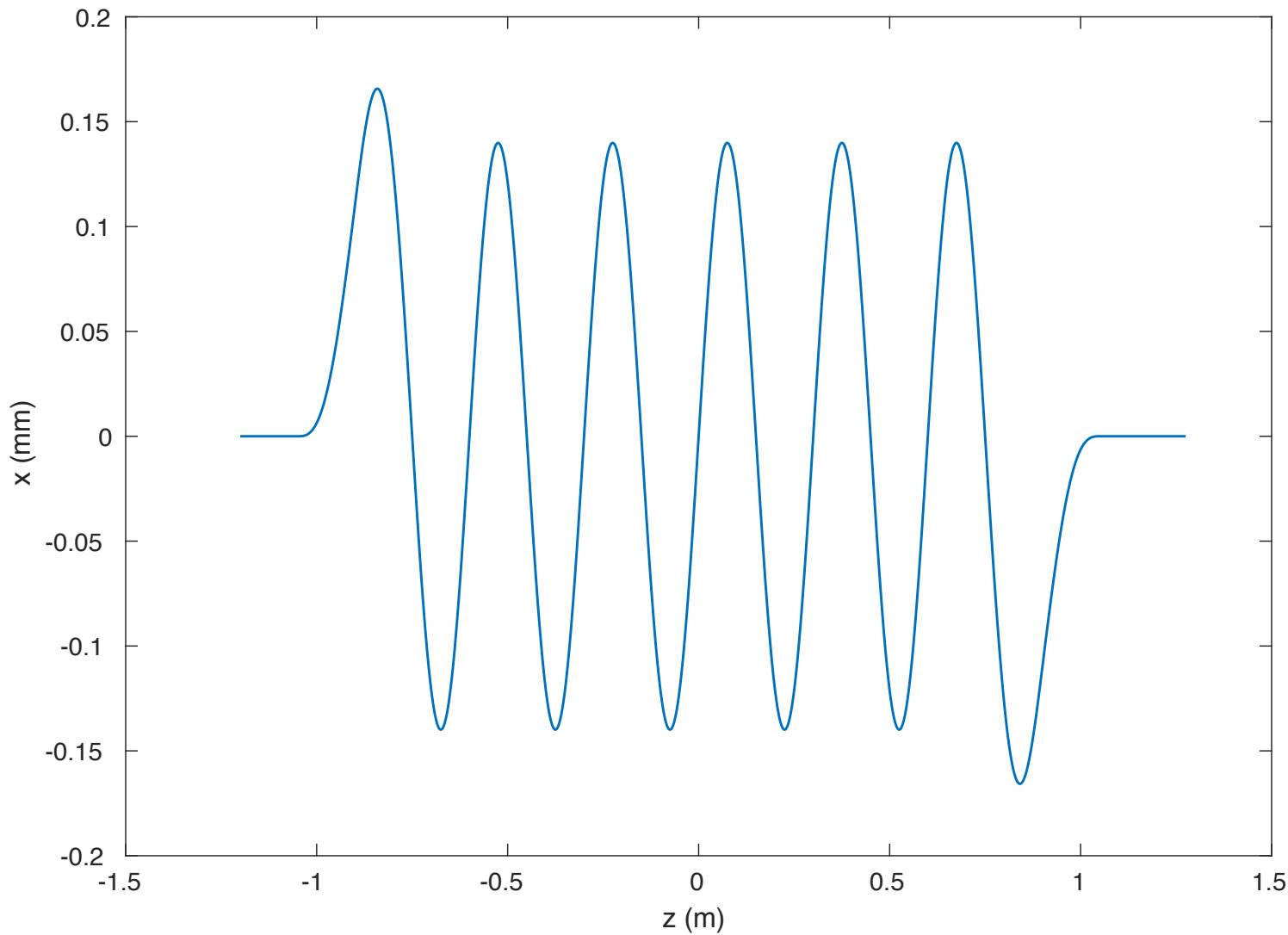
beam energy = 500 MeV, current = 0.39 amp (1nC bunch),  
Bmax = 0.1024 T (K = 2.87), lambda\_und = 30 cm,  
lambda\_1 = 800 nm

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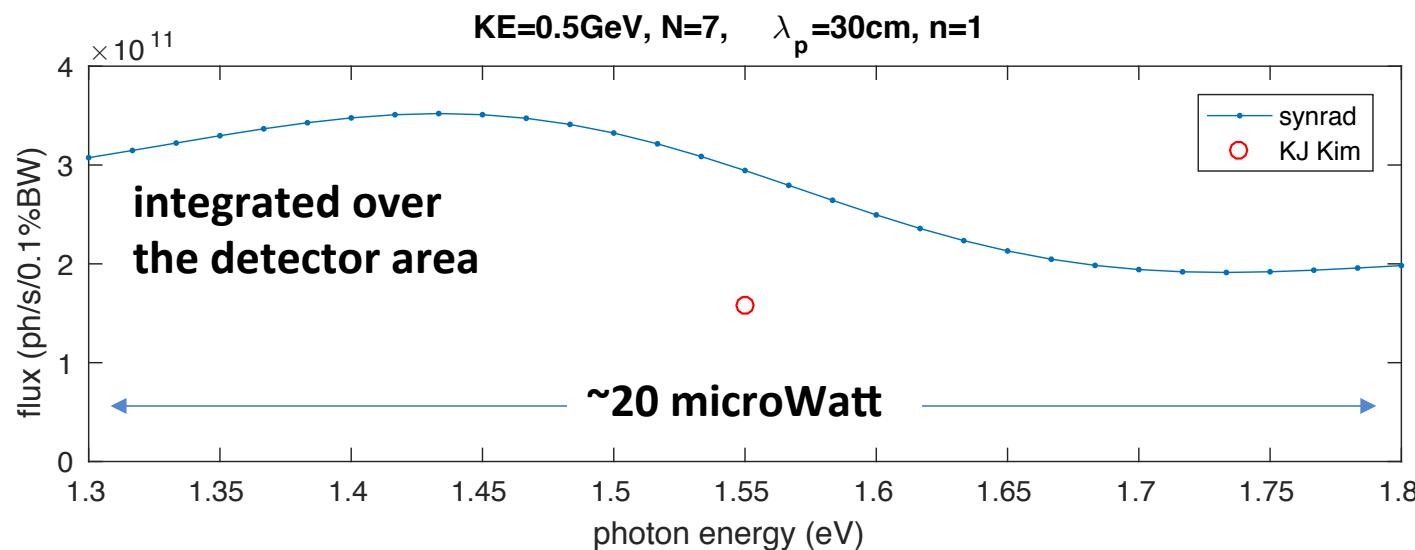
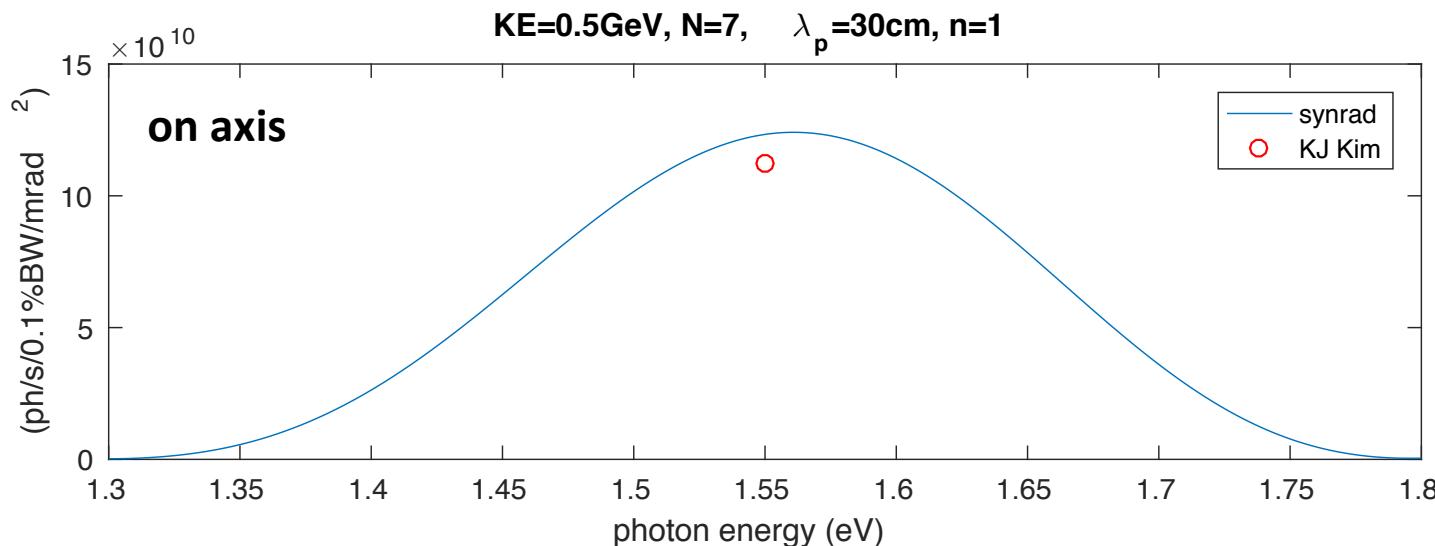
# B-field (5 full periods)



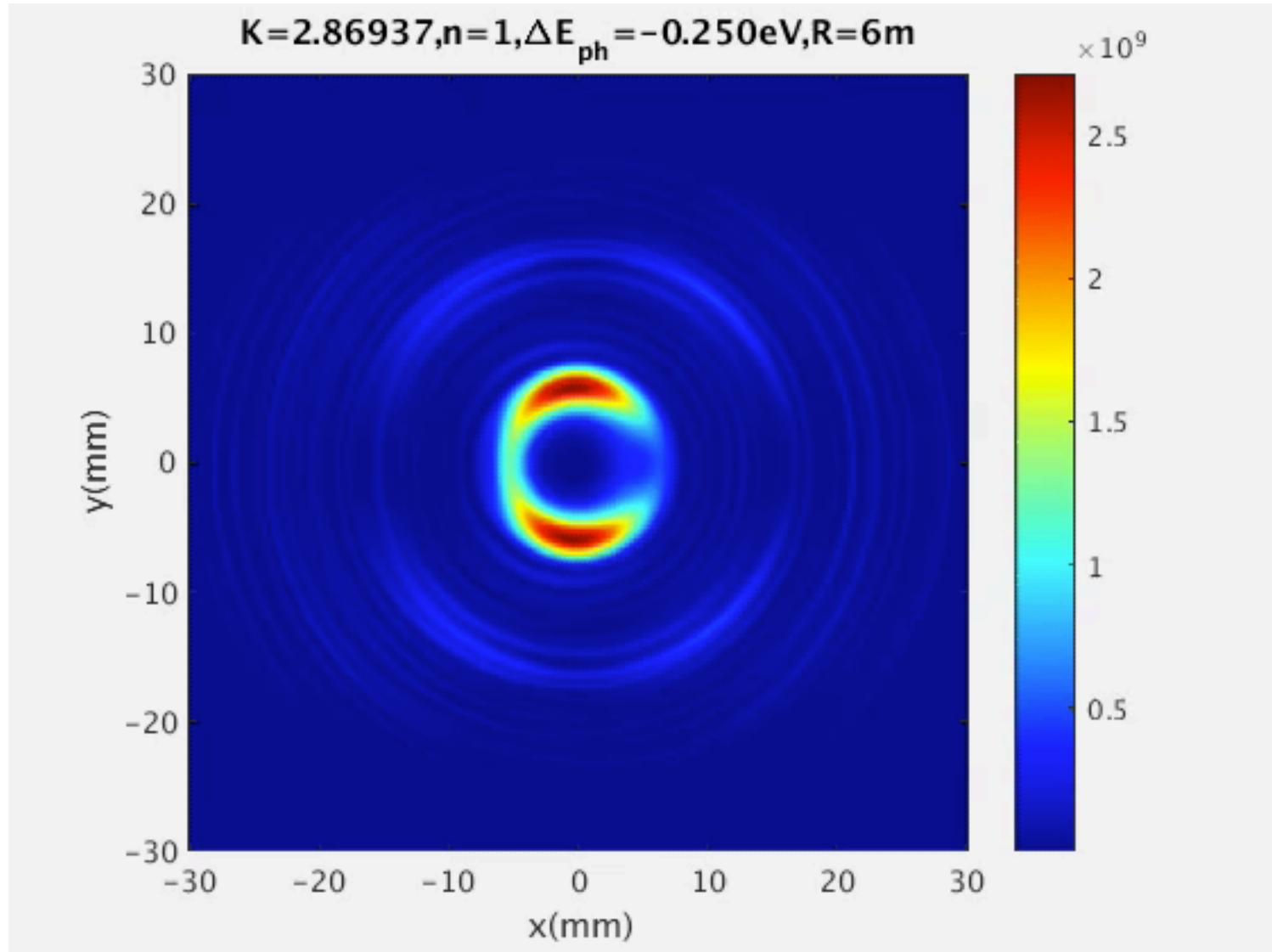
# trajectory



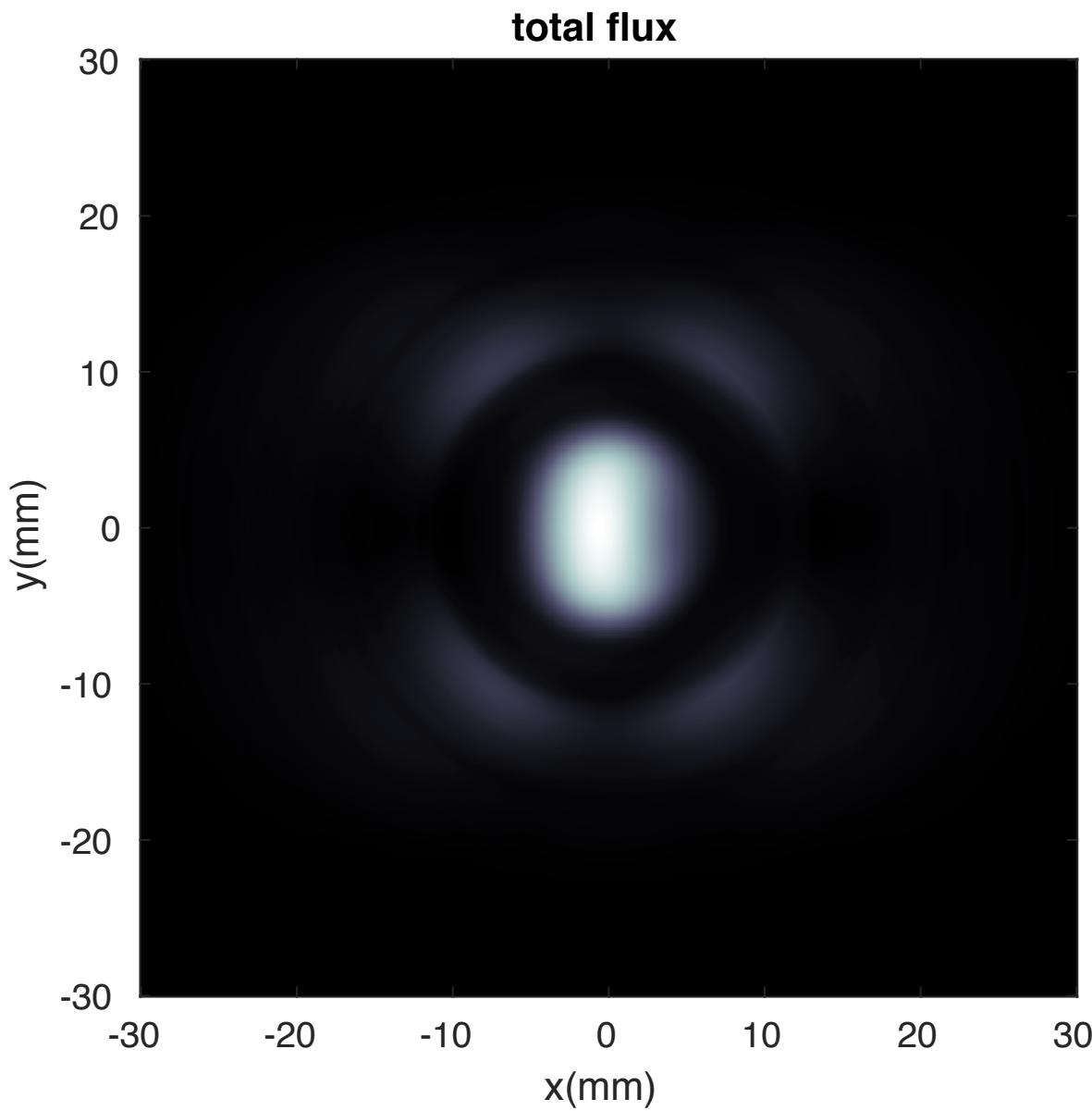
# scan around the fundamental (6 m)



# rad pattern (animation)



@ the location of the crystal (6m)



next steps: use the wavepacket from a single electron to compute the energy gain  $\int E v dt$  in the kicker undulator

