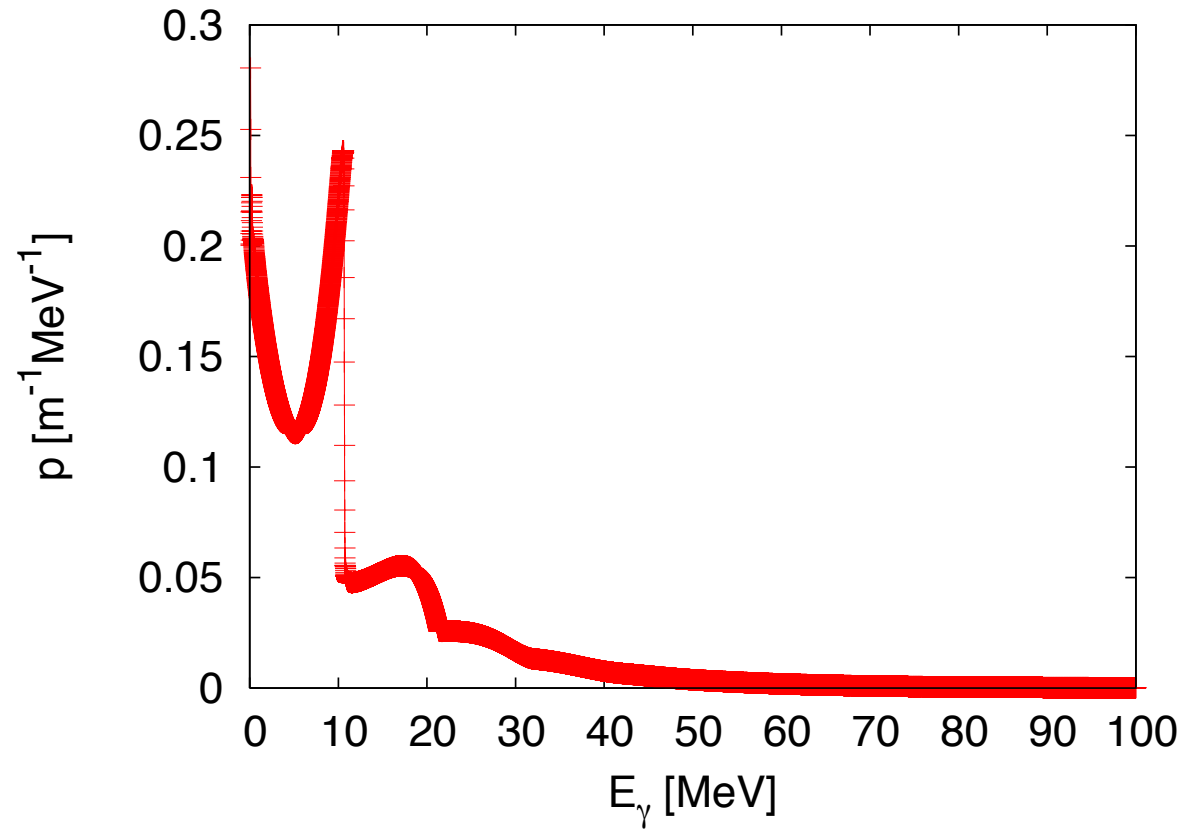


# Lattice

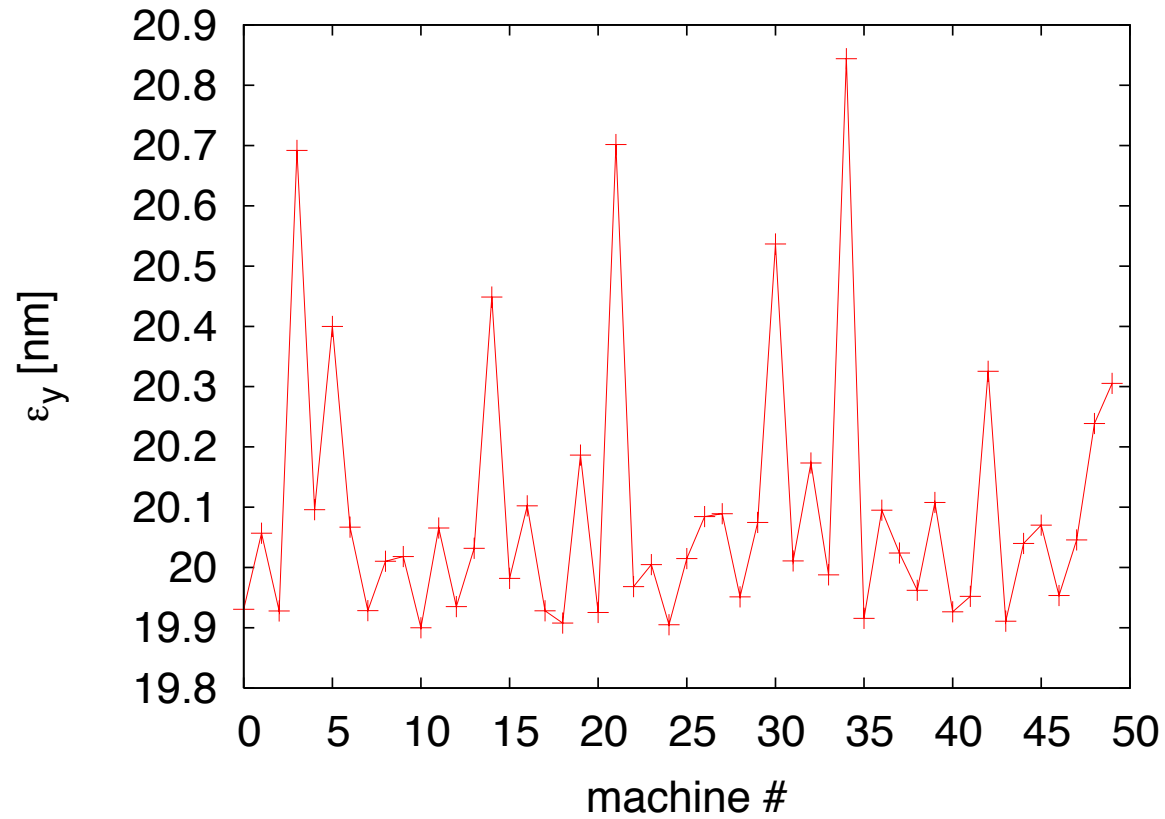
- Regular FODO lattice used
- 6 1.8m long wigglers between quadrupoles
- No wakefields
- Wiggler element implemented in PLACET as simple generator of energy spread
- Simulations performed starting with 20nm vertical emittance
- Misalignments are  $300 \mu\text{m}$  for quadrupoles and BPMs  
(for NLC alignment scheme  $10 \mu\text{m}$  BPM to quad)
- Mean emittance growth is shown

# Photon Spectrum



- Just used RMS as width of Gaussina distribution for now

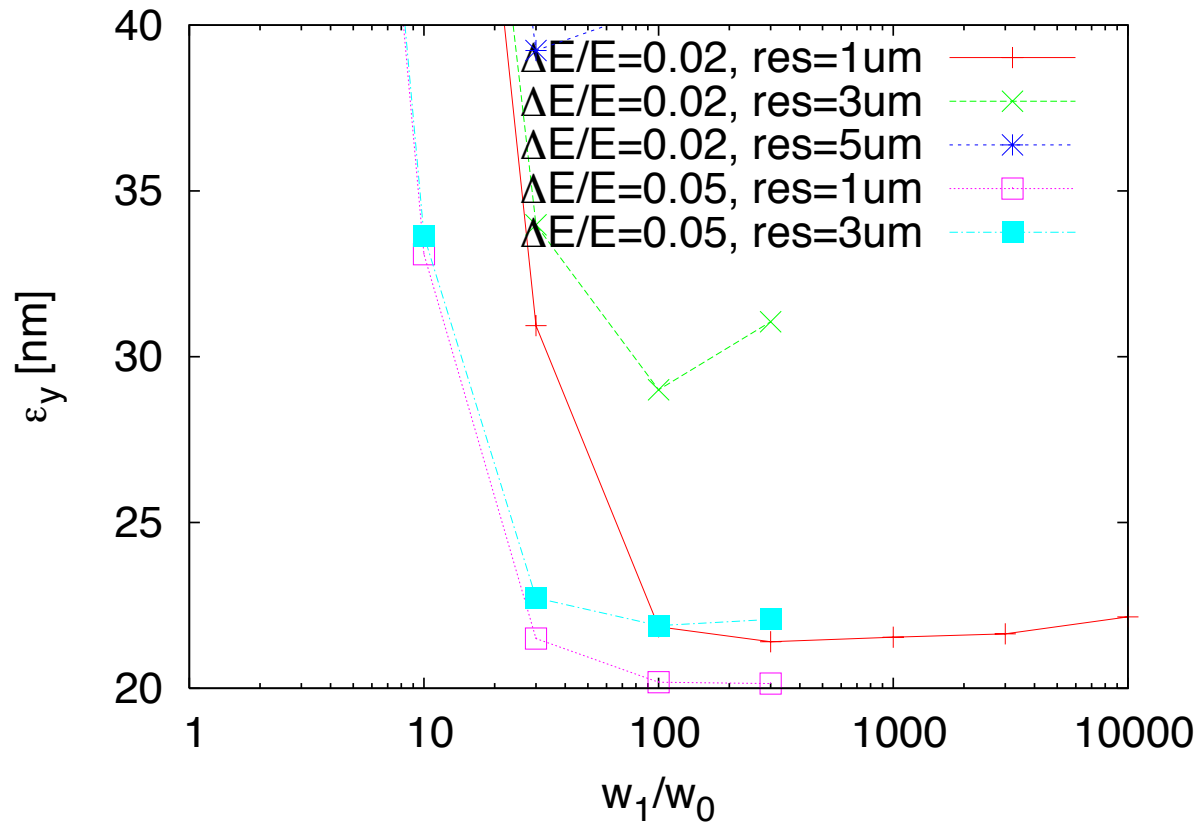
# Results



⇒ seems very good, but used 20% energy difference

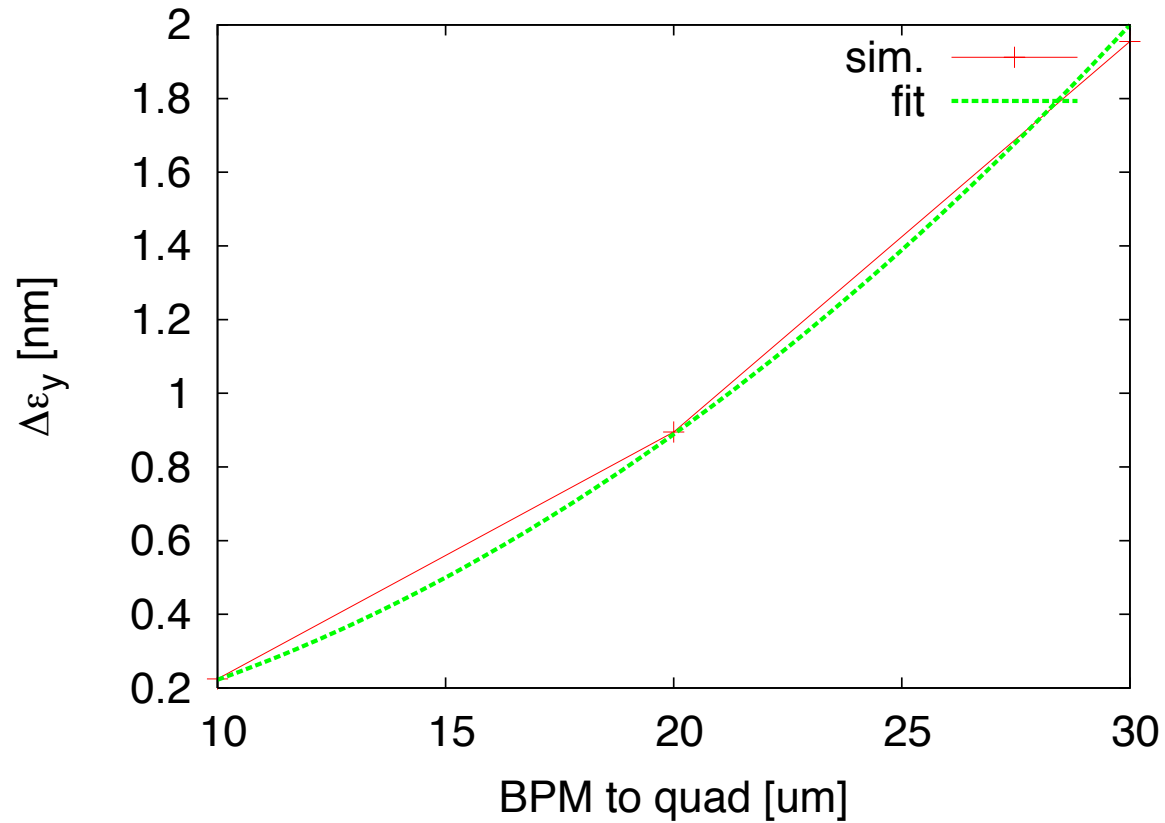
- emittance dominated by stochastic effects

# Results Cont.



⇒ Dispersion free steering

# Quad Shunting



$\Rightarrow$  Kick minimisation also seems to give very good results

$\Rightarrow \Delta\epsilon_y \approx 2 \text{ nm}$  for  $30 \mu\text{m}$  BPM to quad alignment