

Closed orbit and phase advance vs. momentum spread using PTC by Etienne Forest.

Shinji Machida
KEK
November 8, 2002

I. 150MeV FFAG

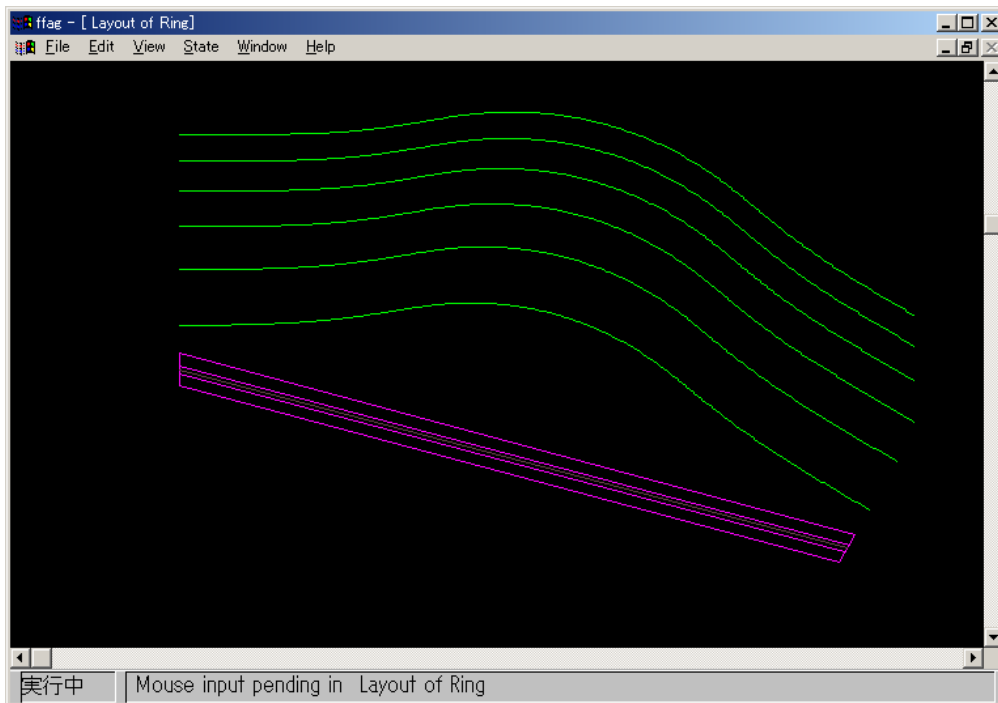


Fig. 1: Five green lines show the closed orbit of $dp/p=0, 0.5, 1.0, 1.5, 2.0, 2.5$, respectively. The reference kinetic energy is 15 MeV (proton).

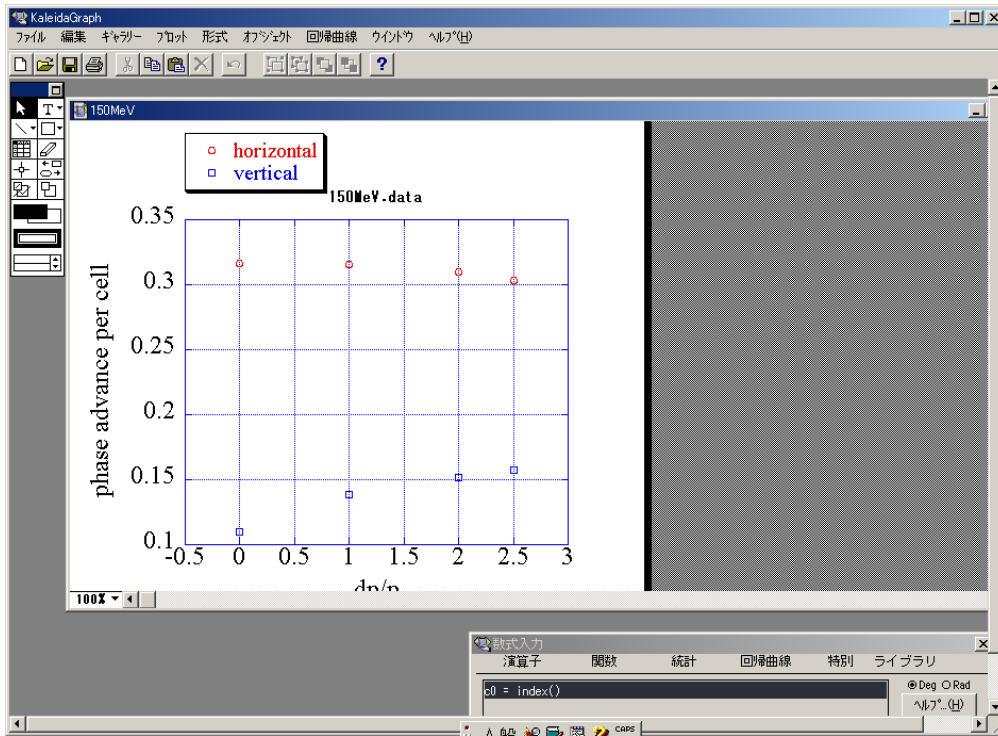


Fig. 2: Transverse tune as a function of momentum.

II. Carol with 1m drift

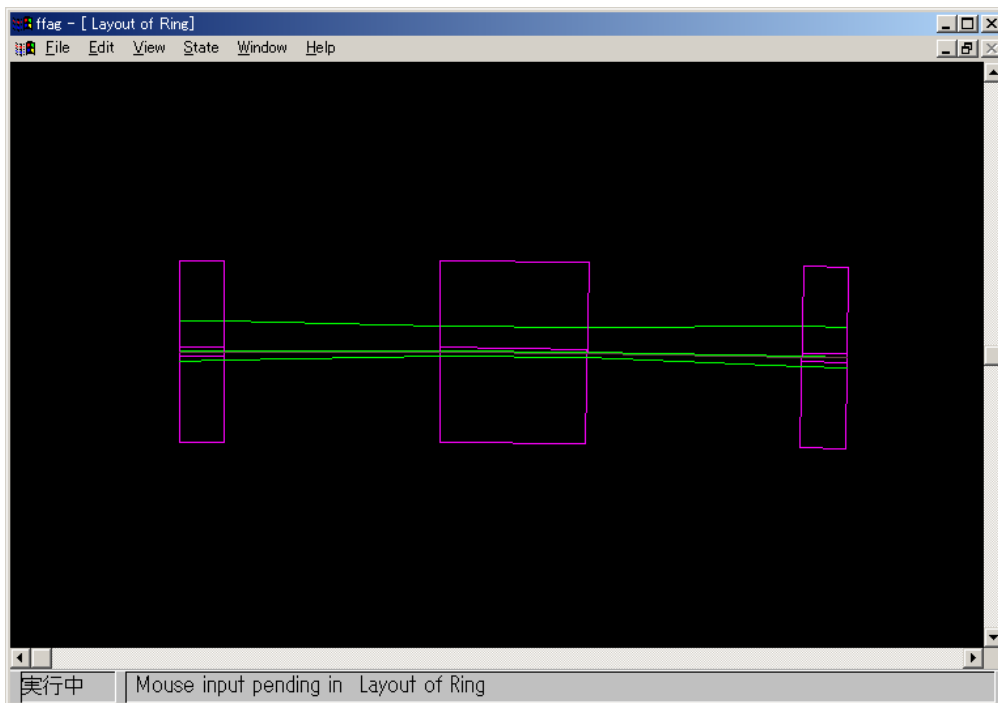


Fig. 3: Three green lines show the closed orbit of $dp/p=-0.5, 0, 0.5$, respectively. The reference momentum is 16.3 GeV/c.

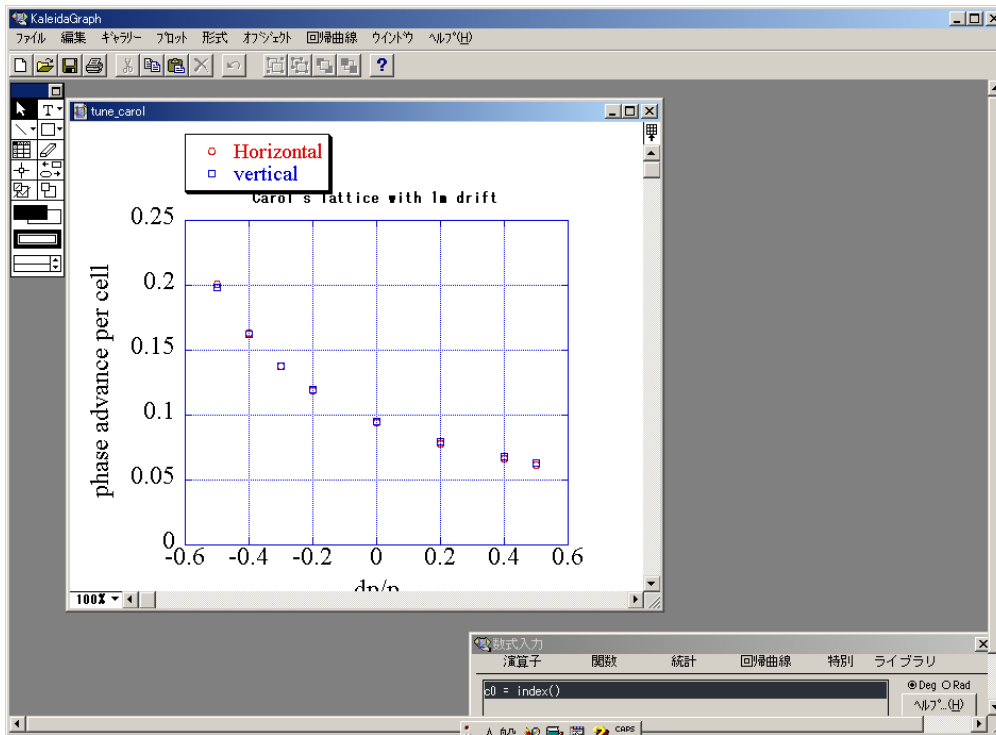


Fig. 4: Transverse tune as a function of momentum.

III. Dejan's

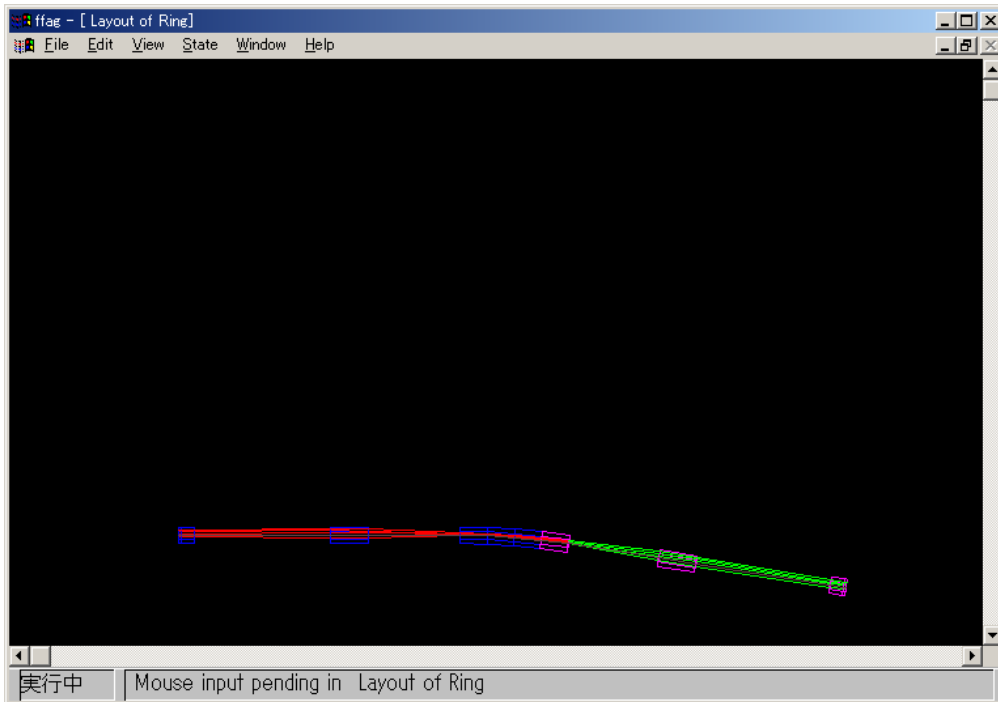


Fig. 5: Five green lines show the closed orbit of $dp/p = -0.3, 0, 0.3, 0.6, 0.9$, respectively. The reference momentum is 15 GeV/c.

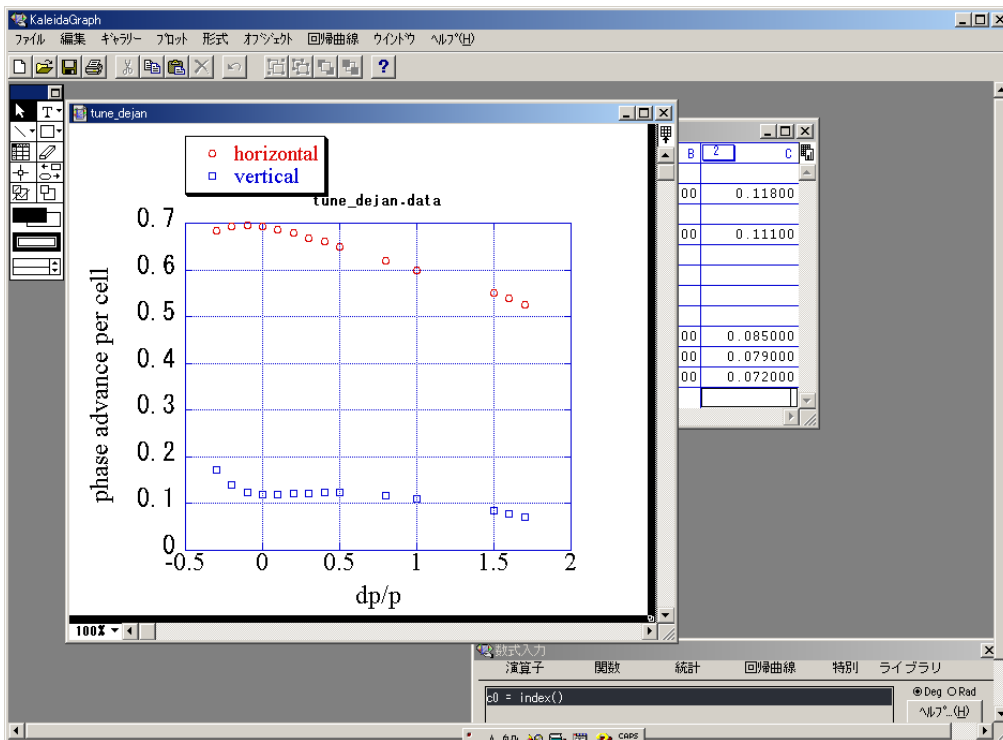


Fig. 6: Transverse tune as a function of momentum.

IV. Carol's Triplet

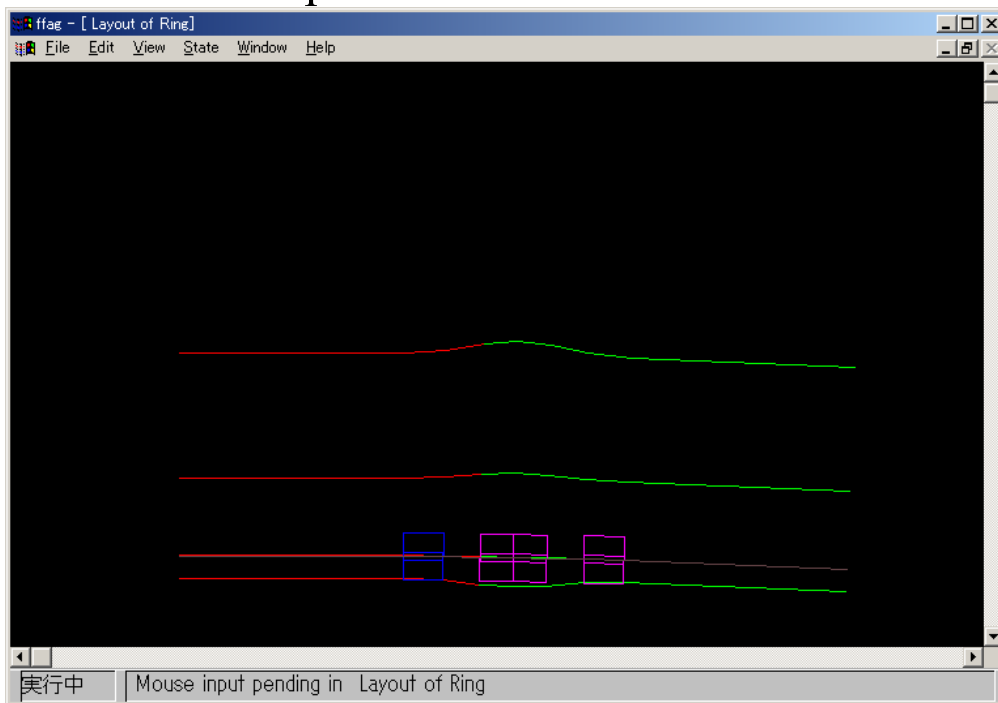


Fig. 7: Four green lines show the closed orbit of $dp/p = -0.5, 0, 0.5, 1.0$, respectively. The reference momentum is unknown.

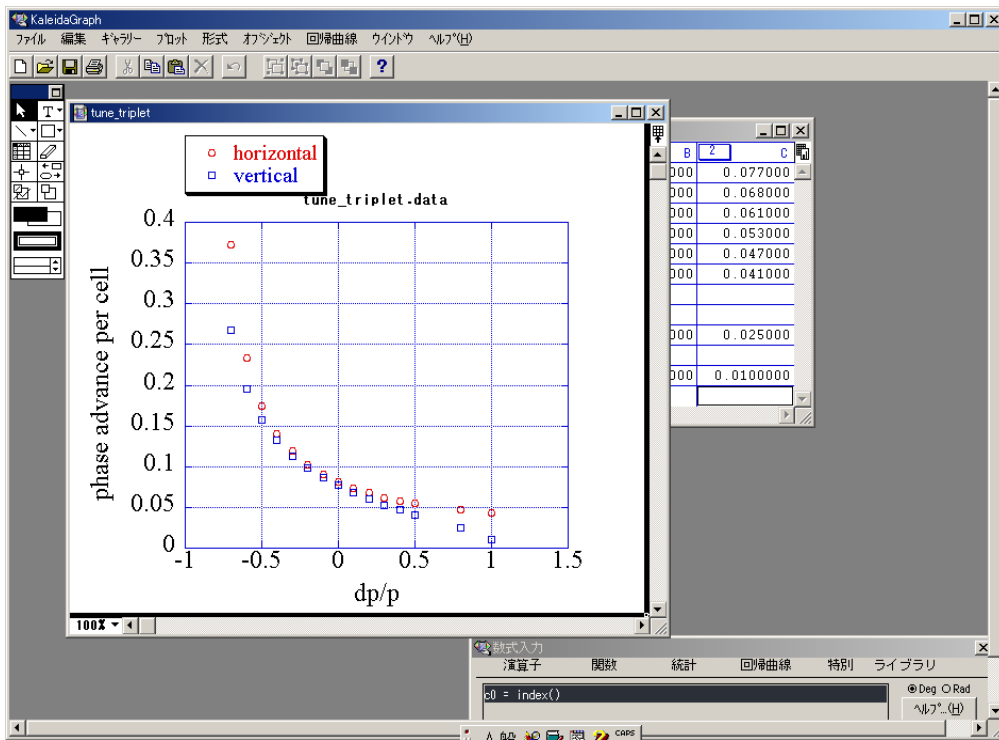


Fig. 8: Transverse tune as a function of momentum.