

# Update (29/05/2012)

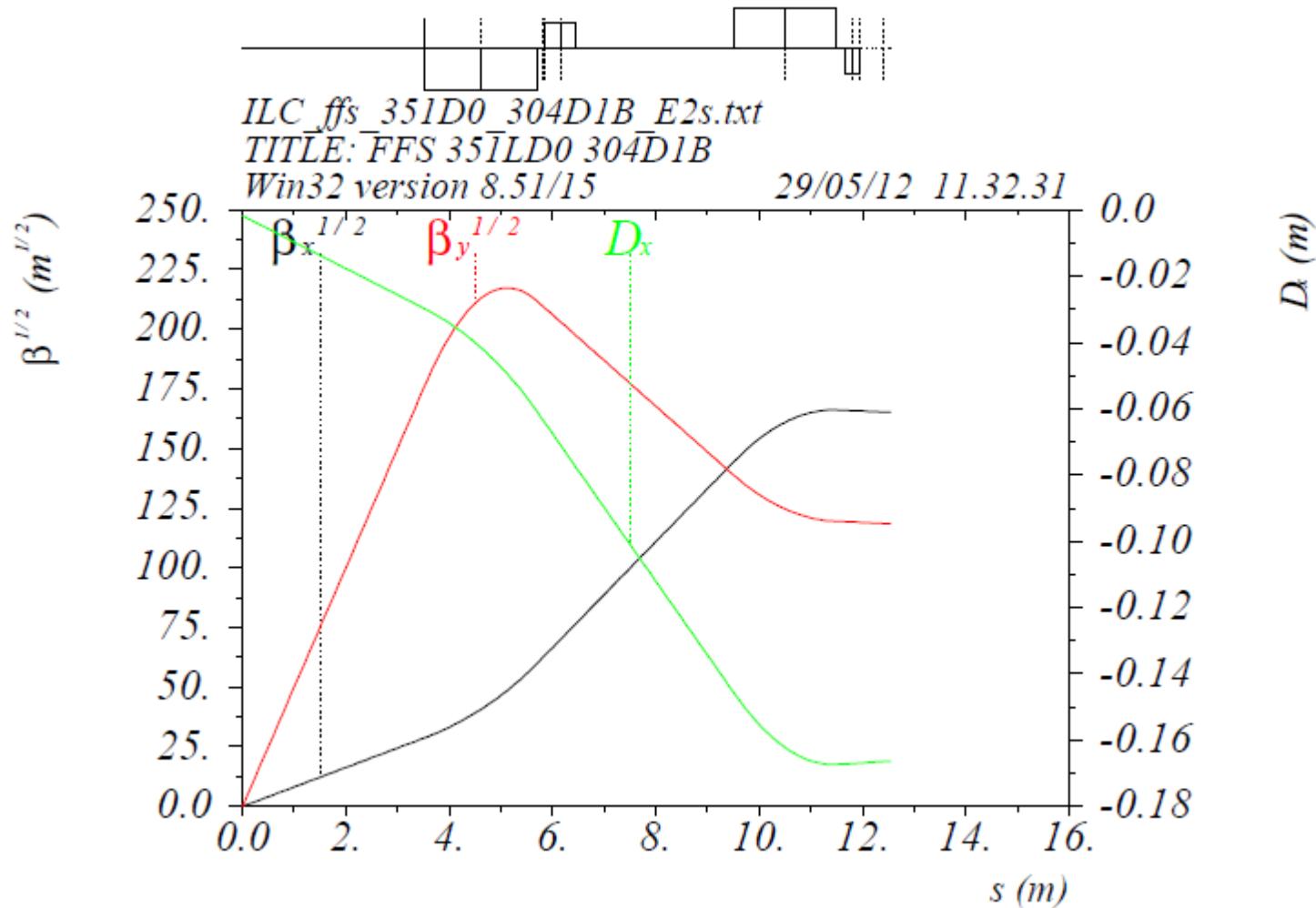
- MAD-X for Windows XP in Oxford – can run it now ( some editing of files was required
- MAD-X via SSH in DESY/CERN is running but..
- I can use converted BDS lattice to first step matching
- Take 250 GeV CoM settings the task is to:
- match to the new  $\beta_x = 13\text{mm}$  and  $\beta_y = 0.41\text{mm}$
- and remove dispersion which is non=zero in the present lattice  
–should vary quadrupoles downstream
- KQF3 := 0.01~~15~~24797231;      kqf3 = 0.01~~147~~786643 ;
- KQD0 := -0.1522~~91~~79766;      kqd0 = -0.1522~~52~~5301 ;
- KQF1 := 0.072349~~09~~233;      kqf1 = 0.072549~~16~~217 ;
- KQF5 := 0.01~~106~~2408721;      kqf5 = 0.01~~09~~7346172 ;
- KQD4 := -0.8~~58~~256166518E-2;      kqd4 = -0.008~~60~~5842666 ;

$$\begin{aligned}\beta_x &= 0.01299999482; & \beta_y &= 0.0004105255407; & \alpha_x &= 3.852111358e-010; \\ \alpha_y &= 3.623848278e-010; & D_x &= -1.285273381e-010\end{aligned}$$

# Update(cont.)

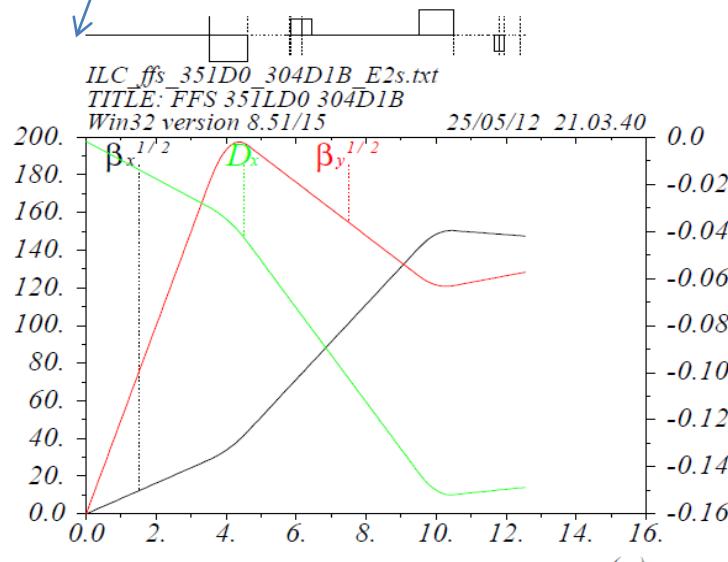
- When I use the full matching program ( with call to Python)from Rogelio, some error message appears:
- *file "getSigmasMixed25.py", line 10, in ?  
from mapclassGaussianDelta25 import \*  
File  
"/afs/desy.de/user/m/malyshev/private/ILC\_BDS/RepILCco  
py/mapclassGaussianDelta25.py", line 4, in ? from numpy  
import \*  
ImportError: No module named numpy*
- *Nevertheless*
- *./getSigmasMixed25.py* is running and I got a list of sigma values. Thus some mistake in redirection to CERN afs happens somewhere.

# 500 GeV CoM final doublet



# IP 250 GeV CoM (unmatched)

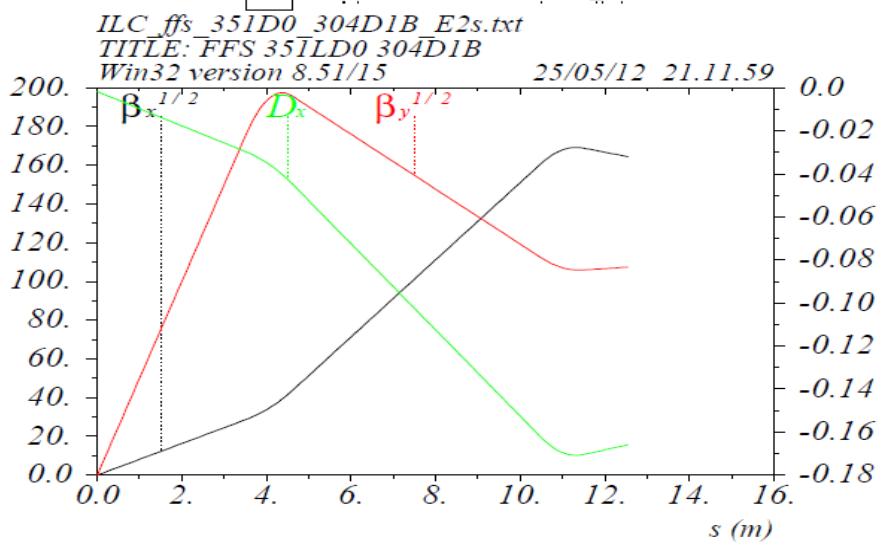
$\beta^{1/2} (m^{v_2})$



D (m)

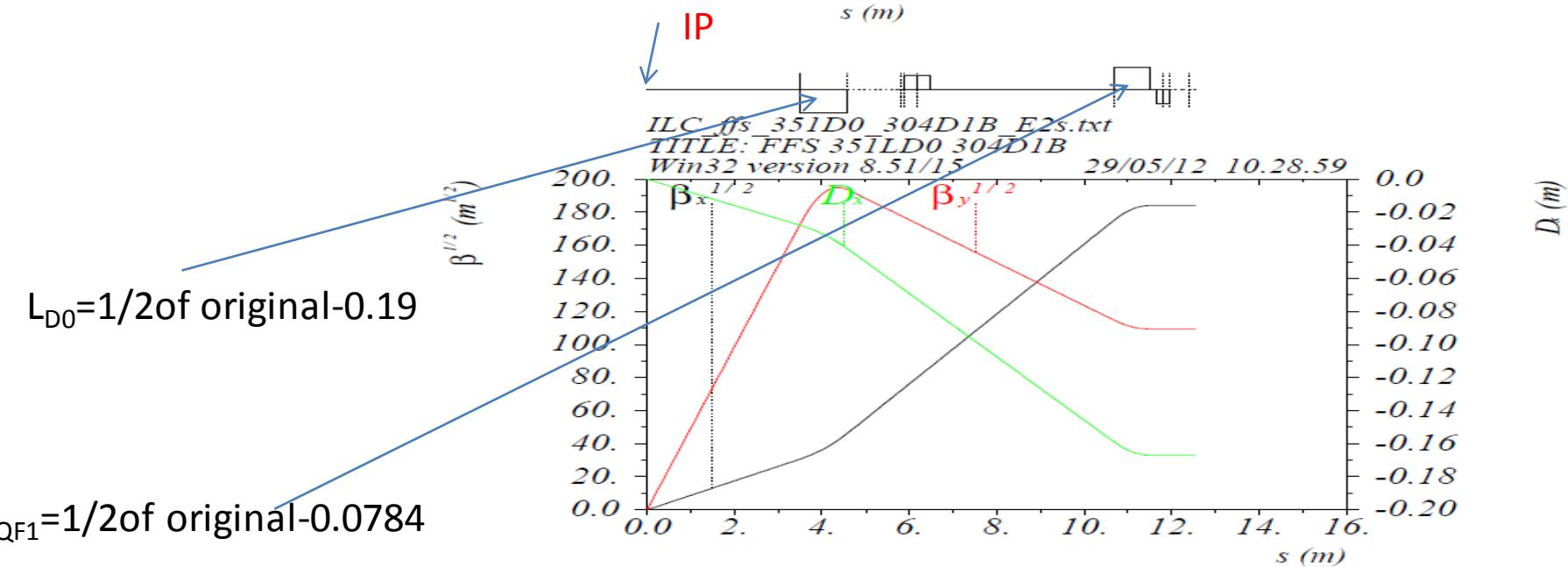
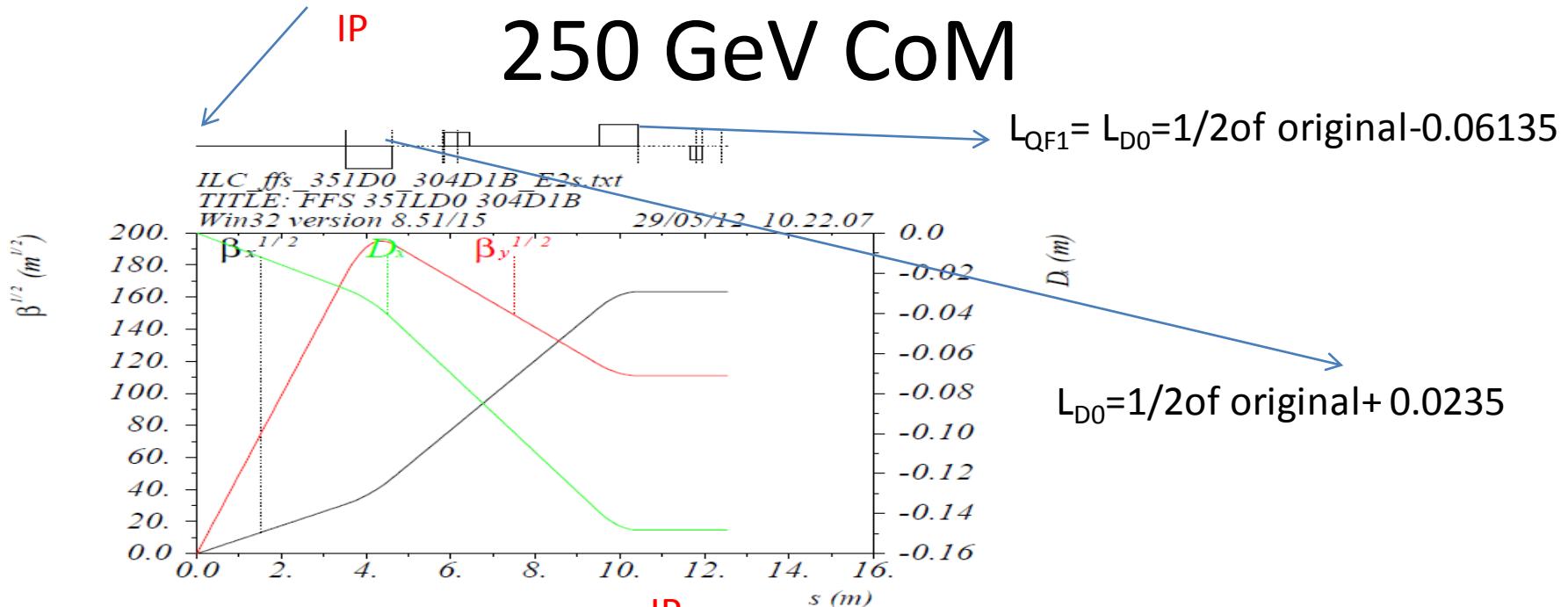
IP

$\beta^{1/2} (m^{v_2})$



D (m)

# 250 GeV CoM



# Plans

- Get MAD-X matching program running ( update Python in DESY or/and short visit to CERN?)
- 250 Gev CoM lattice optimisation over range of parameters