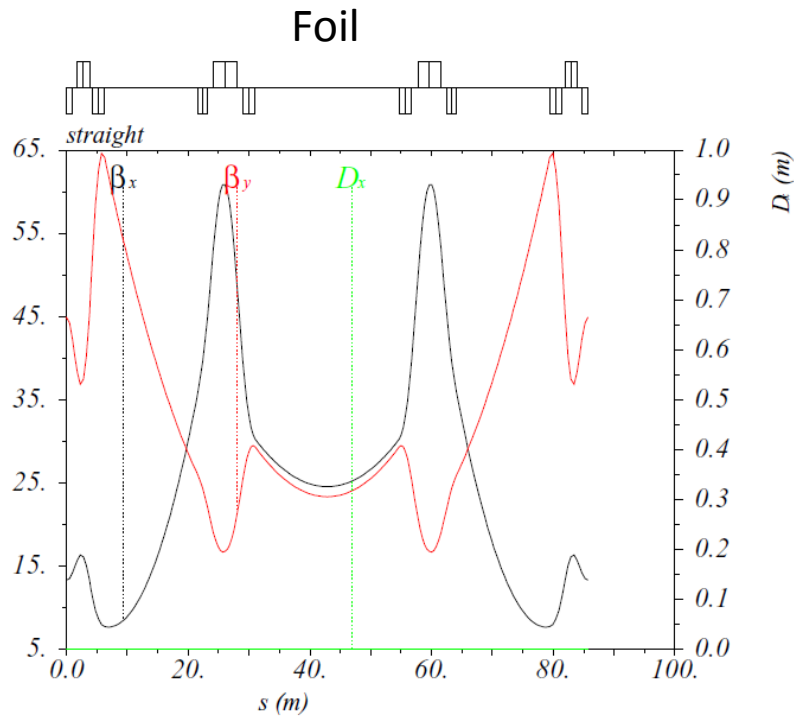
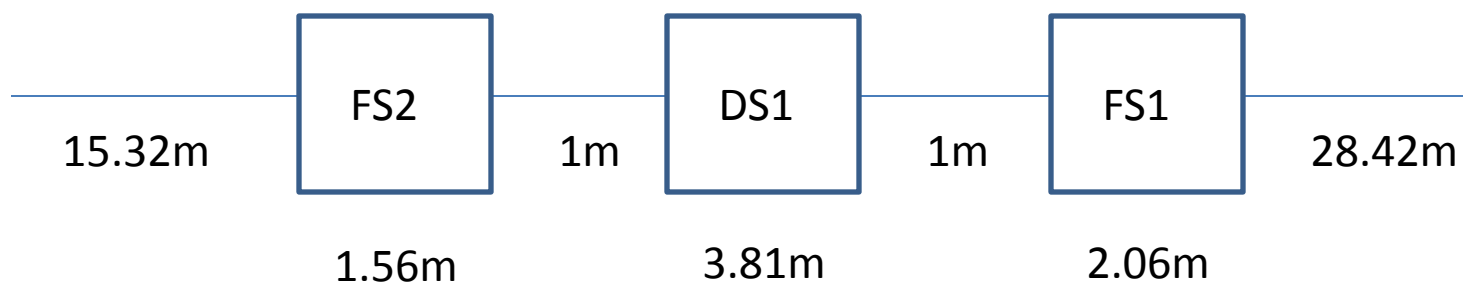


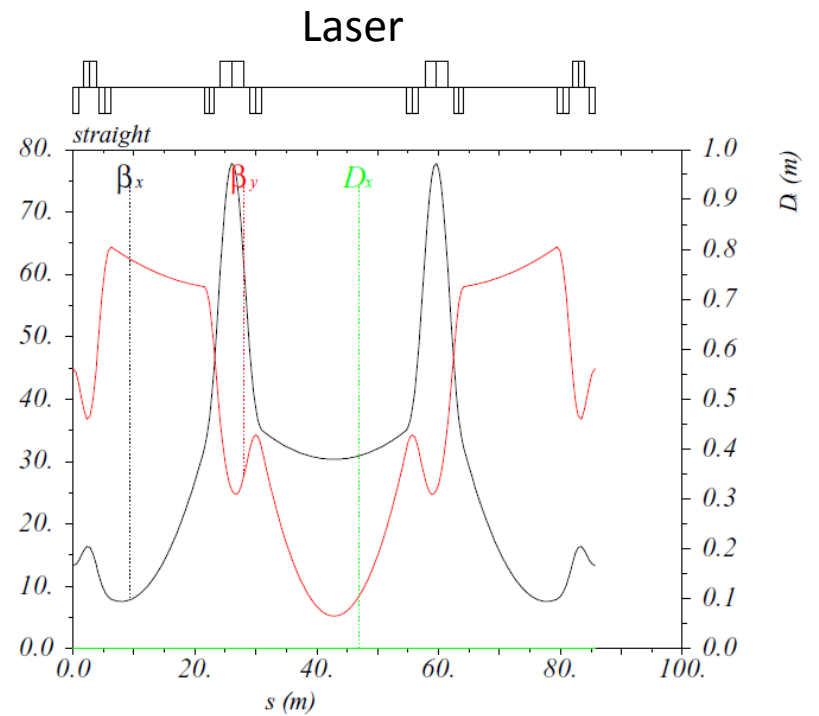
Find a solution for the 50GeV where the triplet max field is lower than 1.3T for the received apertures [Wolfgang.]



```

qx =      14.24 ;
qy =      11.84 ;
betay_inj = 23.35334784 ;
betax_inj = 24.56825084 ;
mux_ext = 106.3977196 ;
betxmax = 60.83783431 ;
betymax = 64.09507015 ;

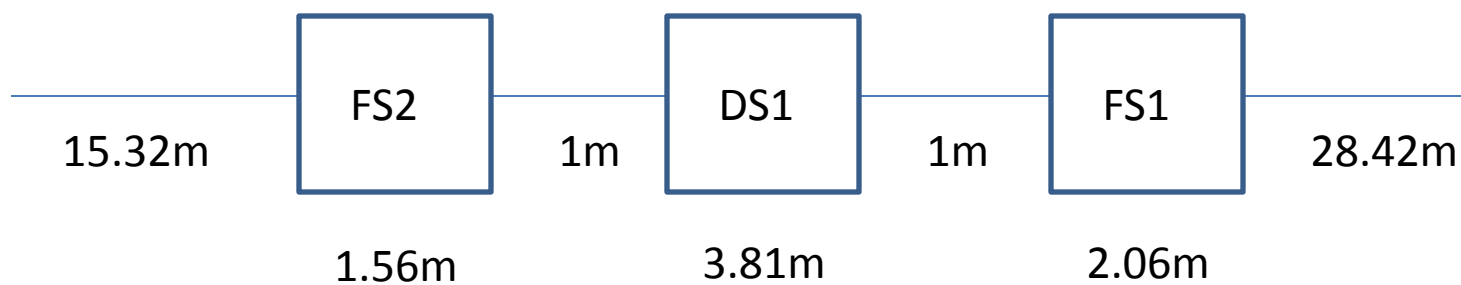
```



```

qx =      14.24 ;
qy =      12.22 ;
betay_inj = 5.246968544 ;
betax_inj = 30.37435032 ;
mux_ext = 98.81727091 ;
betxmax = 77.76816949 ;
betymax = 64.39312217 ;

```



### Foil 50GeV

MQFS1	47 mm	93 mm	95 mm
MQFS2	49 mm	101 mm	98 mm
MQDS1	60 mm	108 mm	120 mm

MQFS1Bpt	-0.41	-0.80	-0.82
MQFS2Bpt	-0.22	-0.46	-0.44
MQDS1Bpt	0.46	0.83	0.92

### Foil 75GeV

MQFS1	42 mm	75 mm	83 mm
MQFS2	39 mm	81 mm	77 mm
MQDS1	45 mm	87 mm	90 mm

MQFS1Bpt	-0.54	-0.97	-1.08
MQFS2Bpt	-0.26	-0.55	-0.52
MQDS1Bpt	0.52	1.00	1.03

### Laser 50GeV

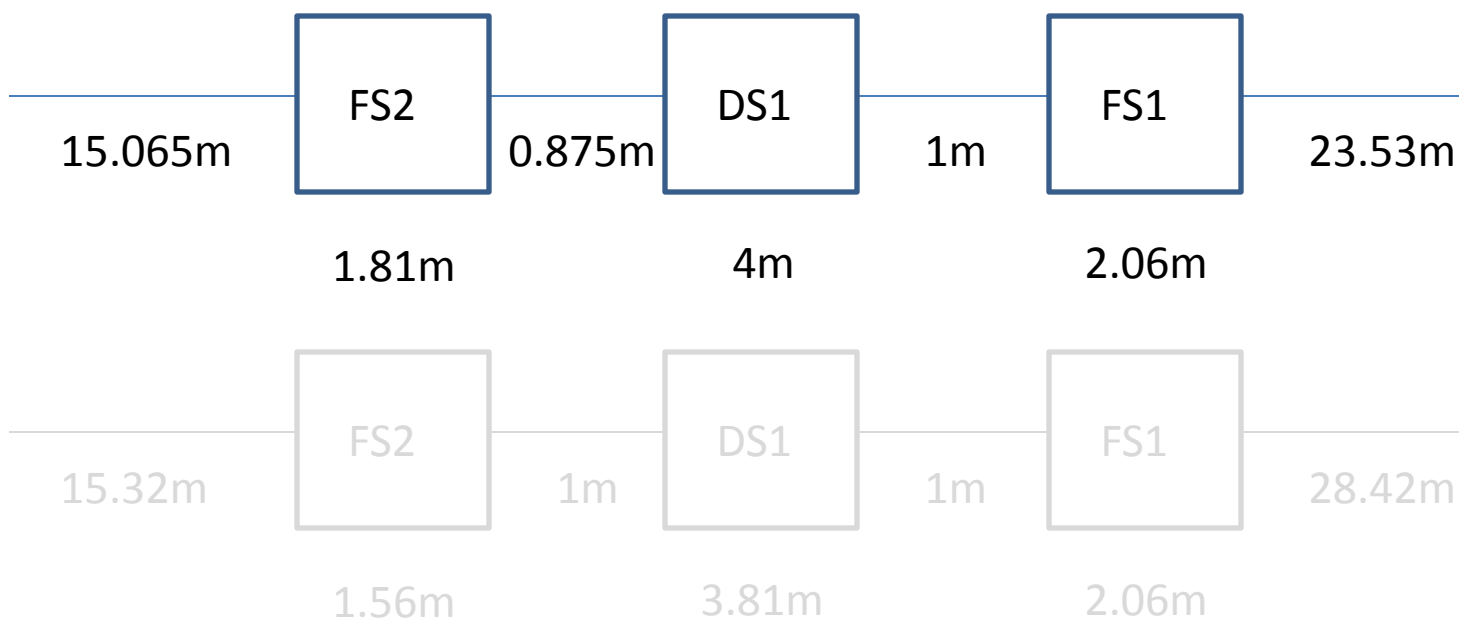
MQFS1	50 mm	100 mm	101 mm
MQFS2	63 mm	104 mm	126 mm
MQDS1	65 mm	117 mm	131 mm

MQFS1Bpt	-0.58	-1.15	-1.16
MQFS2Bpt	-0.79	-1.30	-1.58
MQDS1Bpt	0.68	1.22	1.36

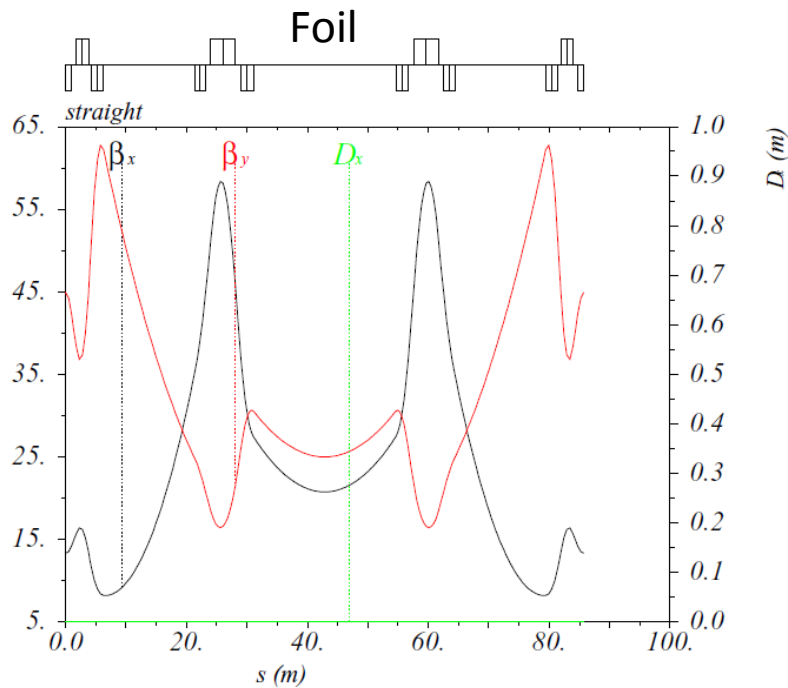
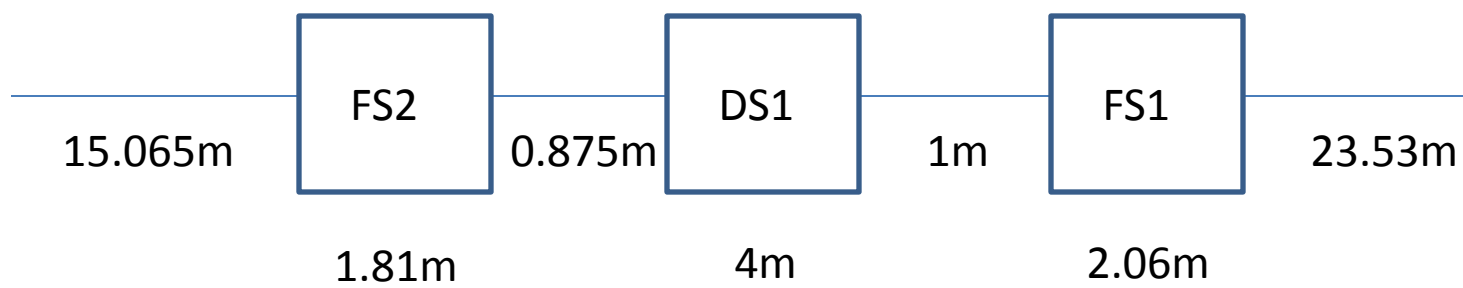
### Laser 75GeV

MQFS1	45 mm	78 mm	90 mm
MQFS2	56 mm	81 mm	112 mm
MQDS1	50 mm	91 mm	100 mm

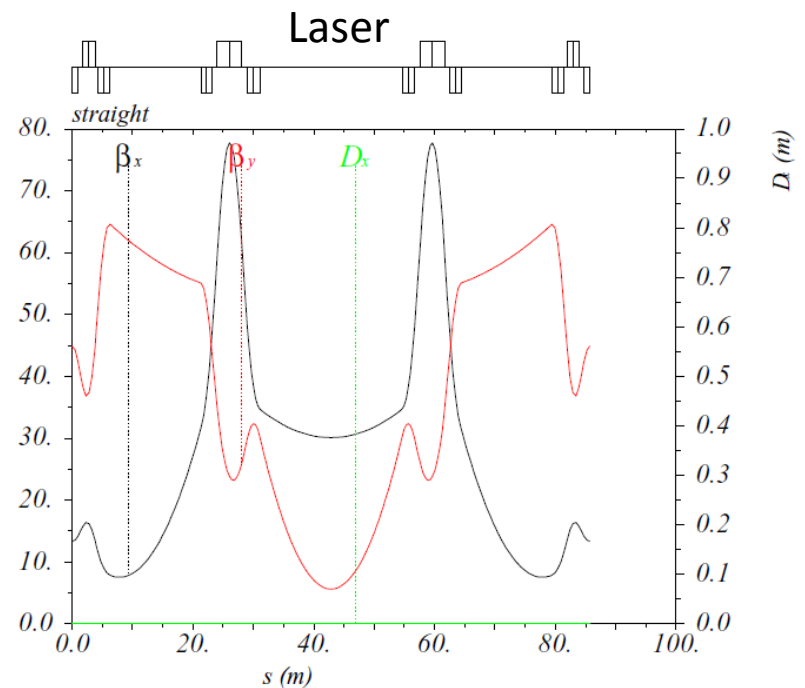
MQFS1Bpt	-0.77	-1.34	-1.55
MQFS2Bpt	-1.05	-1.52	-2.10
MQDS1Bpt	0.78	1.42	1.56



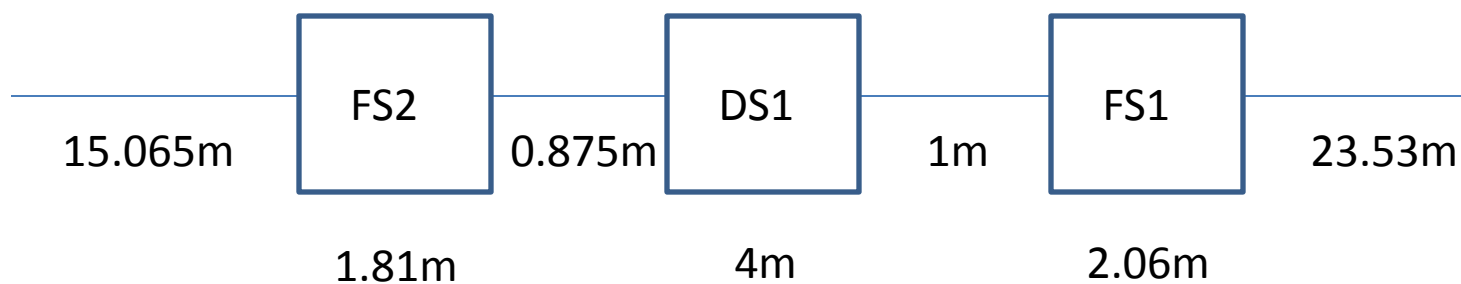
Find a solution for the 50GeV where the triplet max field is lower than 1.3T for the twice the apertures in the triplet quads



qx = 14.24 ;  
 qy = 11.84 ;  
 betay\_inj = 24.99988529 ;  
 betax\_inj = 20.76551284 ;  
 mux\_ext = 115.5520895 ;  
 betxmax = 58.15625899 ;  
 betymax = 62.19201238 ;



qx = 14.24 ;  
 qy = 12.22 ;  
 betay\_inj = 5.634213869 ;  
 betax\_inj = 30.10657914 ;  
 mux\_ext = 99.7319113 ;  
 betxmax = 77.7225263 ;  
 betymax = 64.59525023 ;



### Foil 50GeV

MQFS1	48 mm	93 mm	96 mm
MQFS2	49 mm	101 mm	98 mm
MQDS1	59 mm	108 mm	117 mm

MQFS1Bpt	-0.42	-0.81	-0.84
MQFS2Bpt	-0.17	-0.34	-0.33
MQDS1Bpt	0.42	0.78	0.84

### Foil 75GeV

MQFS1	42 mm	75 mm	84 mm
MQFS2	38 mm	81 mm	75 mm
MQDS1	44 mm	87 mm	88 mm

MQFS1Bpt	-0.55	-0.98	-1.10
MQFS2Bpt	-0.19	-0.41	-0.38
MQDS1Bpt	0.48	0.94	0.95

### Laser 50GeV

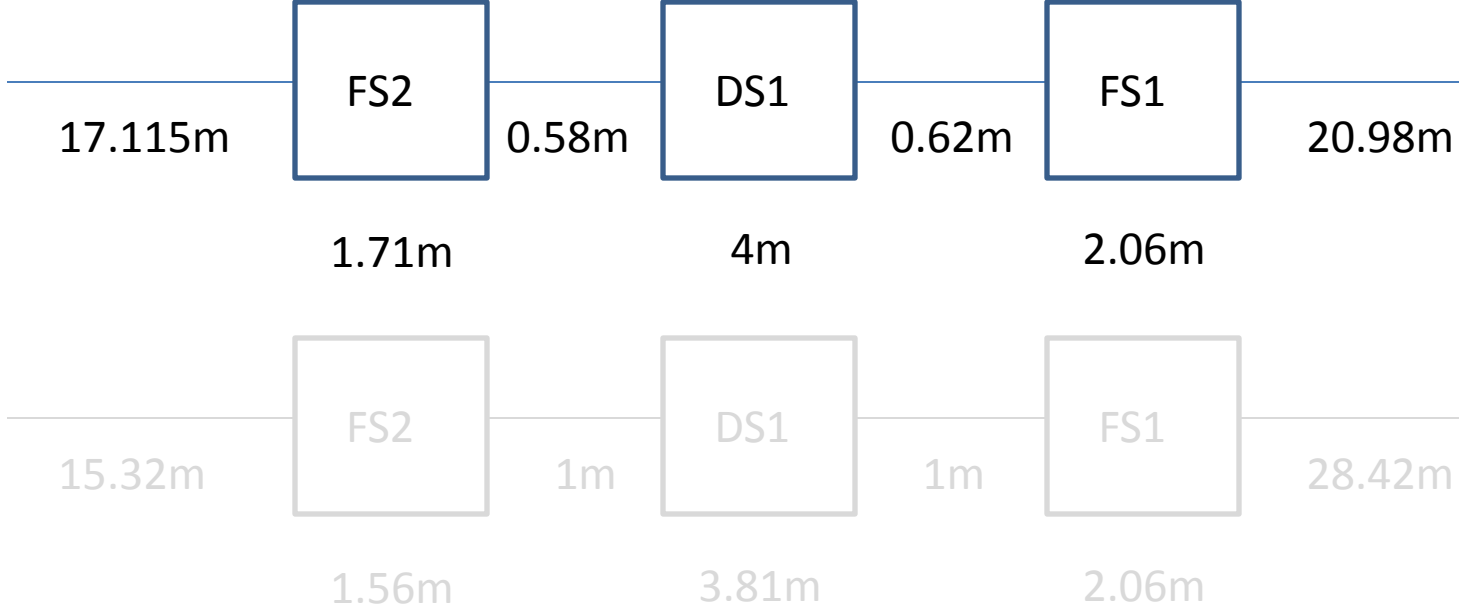
MQFS1	49 mm	100 mm	98 mm
MQFS2	61 mm	104 mm	122 mm
MQDS1	65 mm	117 mm	131 mm

MQFS1Bpt	-0.56	-1.14	-1.12
MQFS2Bpt	-0.65	-1.10	-1.29
MQDS1Bpt	0.64	1.15	1.28

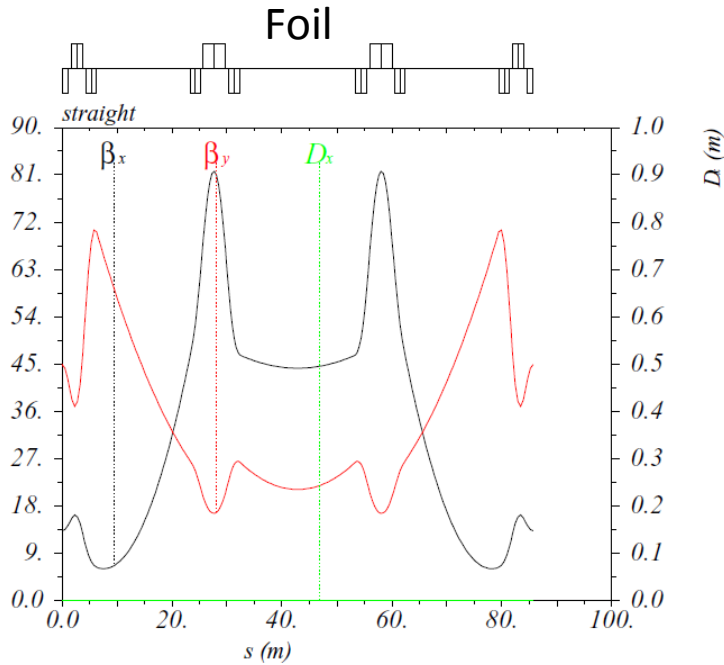
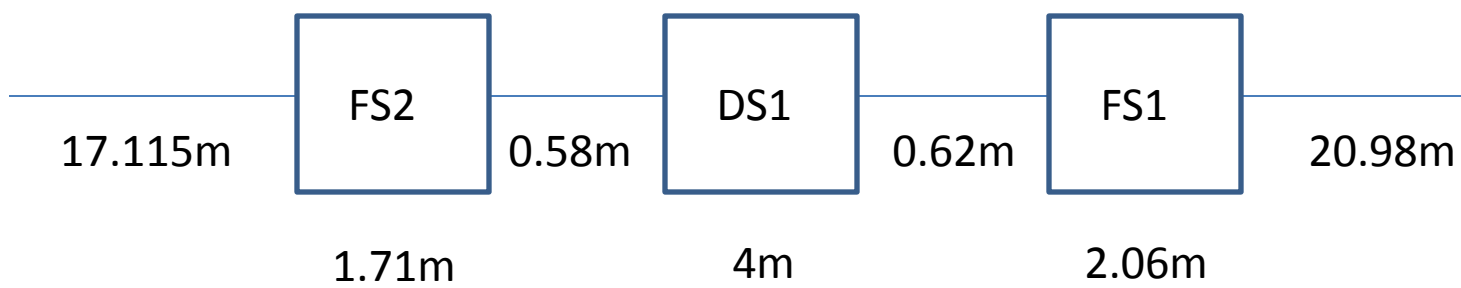
### Laser 75GeV

MQFS1	44 mm	78 mm	87 mm
MQFS2	54 mm	81 mm	109 mm
MQDS1	50 mm	91 mm	100 mm

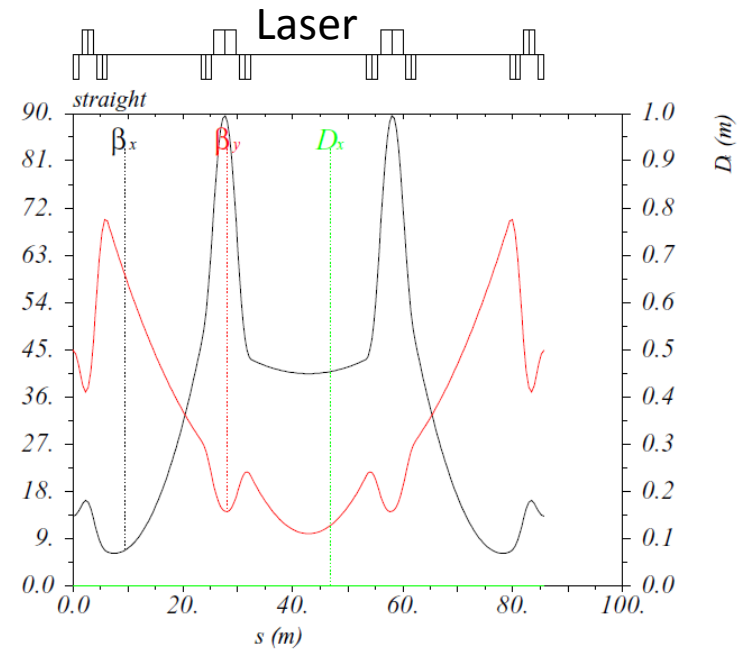
MQFS1Bpt	-0.75	-1.34	-1.50
MQFS2Bpt	-0.86	-1.28	-1.72
MQDS1Bpt	0.74	1.34	1.47



Find a solution with the side drifts enlarged

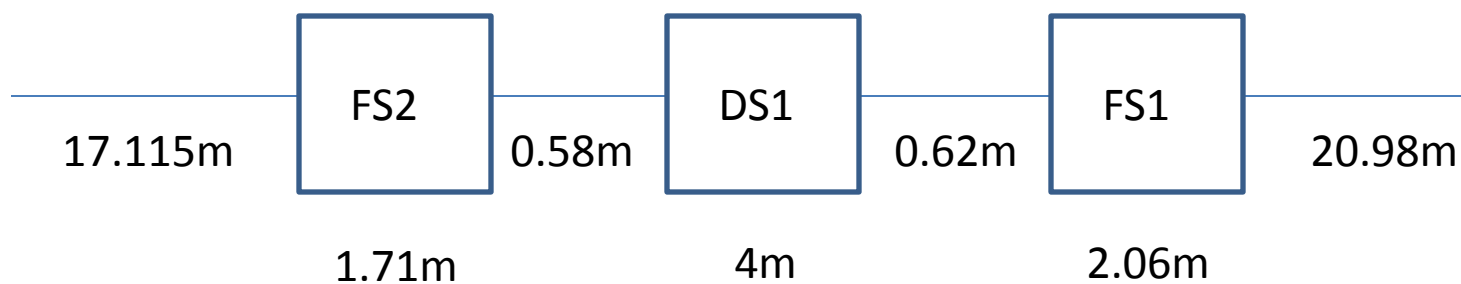


qx = 14.24 ;  
 qy = 11.84 ;  
 betay\_inj = 21.17570132 ;  
 betax\_inj = 44.25168036 ;  
 mux\_ext = 72.10009291 ;  
 betxmax = 81.66786833 ;  
 betymax = 70.13779544 ;



qx = 14.24 ;  
 qy = 12.22 ;  
 betay\_inj = 9.997477092 ;  
 betax\_inj = 40.47775897 ;  
 mux\_ext = 74.59253595 ;  
 betxmax = 89.54805124 ;  
 betymax = 69.53559285 ;





### FOIL 50GeV

MQFS1	54 mm	93 mm	109 mm
MQFS2	56 mm	101 mm	112 mm
MQDS1	68 mm	108 mm	137 mm

MQFS1Bpt	-0.47	-0.81	-0.95
MQFS2Bpt	-0.29	-0.52	-0.58
MQDS1Bpt	0.52	0.81	1.03

### FOIL 75GeV

MQFS1	41 mm	75 mm	82 mm
MQFS2	42 mm	81 mm	84 mm
MQDS1	51 mm	87 mm	102 mm

MQFS1Bpt	-0.53	-0.98	-1.07
MQFS2Bpt	-0.32	-0.63	-0.65
MQDS1Bpt	0.58	0.98	1.16

### LASER 50GeV

MQFS1	52 mm	100 mm	103 mm
MQFS2	54 mm	104 mm	109 mm
MQDS1	70 mm	117 mm	140 mm

MQFS1Bpt	-0.61	-1.18	-1.22
MQFS2Bpt	-0.44	-0.84	-0.88
MQDS1Bpt	0.65	1.09	1.31

### LASER 75GeV

MQFS1	40 mm	78 mm	80 mm
MQFS2	42 mm	81 mm	83 mm
MQDS1	53 mm	91 mm	107 mm

MQFS1Bpt	-0.70	-1.38	-1.41
MQFS2Bpt	-0.50	-0.98	-1.01
MQDS1Bpt	0.75	1.28	1.50