

Nov 2005 configurations: beta\* and crossing schemes

name	IP1	IP2	IP5	IP8	file
injection	17.	10.0	17.	10.0	.inj
nominal	0.55	10.0	0.55	10.0	.coll
low-beta	0.55	0.50	0.55	1.00	.lowb
early coll	2.0	10.0	2.0	2.00	.ecol
Pb coll	0.55	0.50	0.55	10.0	.ions

```
==== IP1 =====
inj    x = -0.002500          y = -0.000000  py = 0.000160
coll   x = -0.000500          y = -0.000500  py = 0.000142
lowb   x = -0.000500          y = -0.000500  py = 0.000142
ecol   x = -0.000500          y = -0.000322  py = 0.000092
ions   ??????
```

```
==== IP2 =====
inj    x = 0.002000          py = 0.000170
coll   x = 0.000500          py = 0.000080
lowb   x = 0.000100          py = 0.000090
ecol   x = 0.000500          py = 0.000170
ions   x = 0.000100          py = -0.000080
```

```
==== IP5 =====
inj    x = 0.000000  px = 0.000160  y = 0.002500
coll   x = 0.000500  px = 0.000142  y = 0.000500
lowb   x = 0.000500  px = 0.000142  y = 0.000500
ecol   x = 0.000322; px = 0.000092  y = 0.000500
ions   ??????
```

```
==== IP8 =====
inj          px = -0.000170  y = -0.002000
coll         px = -0.000210  y = -0.000500
lowb         px = -0.000150  y = -0.000500
ecol         px = -0.000210  y = -0.000500
ions  unsqueezed, separated
```

Scaling of crossing angle as a function of the spectrometer setting  
 Example of IP2:

```
sc_x2p      := 170/(170) ;
sc_x2z      := 170/(170) ;
sc_x2n      := -170/(170) ;
```

```
sc_x2      := ((sc_x2p+sc_x2n)/2-sc_x2z)*on_alice*on_alice
            +(sc_x2p-sc_x2n)/2*on_alice
            + sc_x2z ;

acbxv1.l2  := -0.000000000000*on_x2*sc_x2 ;
acbxv1.r2  := -0.000000000000*on_x2*sc_x2 ;
acbyvs4.l2b1 := -0.000066846300*on_x2*sc_x2 ;
acbyvs4.r2b1 := -0.000032639812*on_x2*sc_x2 ;
acbyvs5.l2b1 := -0.000000000000*on_x2*sc_x2 ;
acbyvs5.r2b1 := +0.000057337946*on_x2*sc_x2 ;
acbyvs4.l2b2 := -0.000013481602*on_x2*sc_x2 ;
acbyvs4.r2b2 := -0.000066937891*on_x2*sc_x2 ;
acbyvs5.l2b2 := +0.000045792594*on_x2*sc_x2 ;
acbyvs5.r2b2 := -0.000000000000*on_x2*sc_x2 ;
acbcv6.l2b1 := -0.000006683055*on_x2*sc_x2 ;
acbcv6.r2b2 := -0.000007573750*on_x2*sc_x2 ;
```