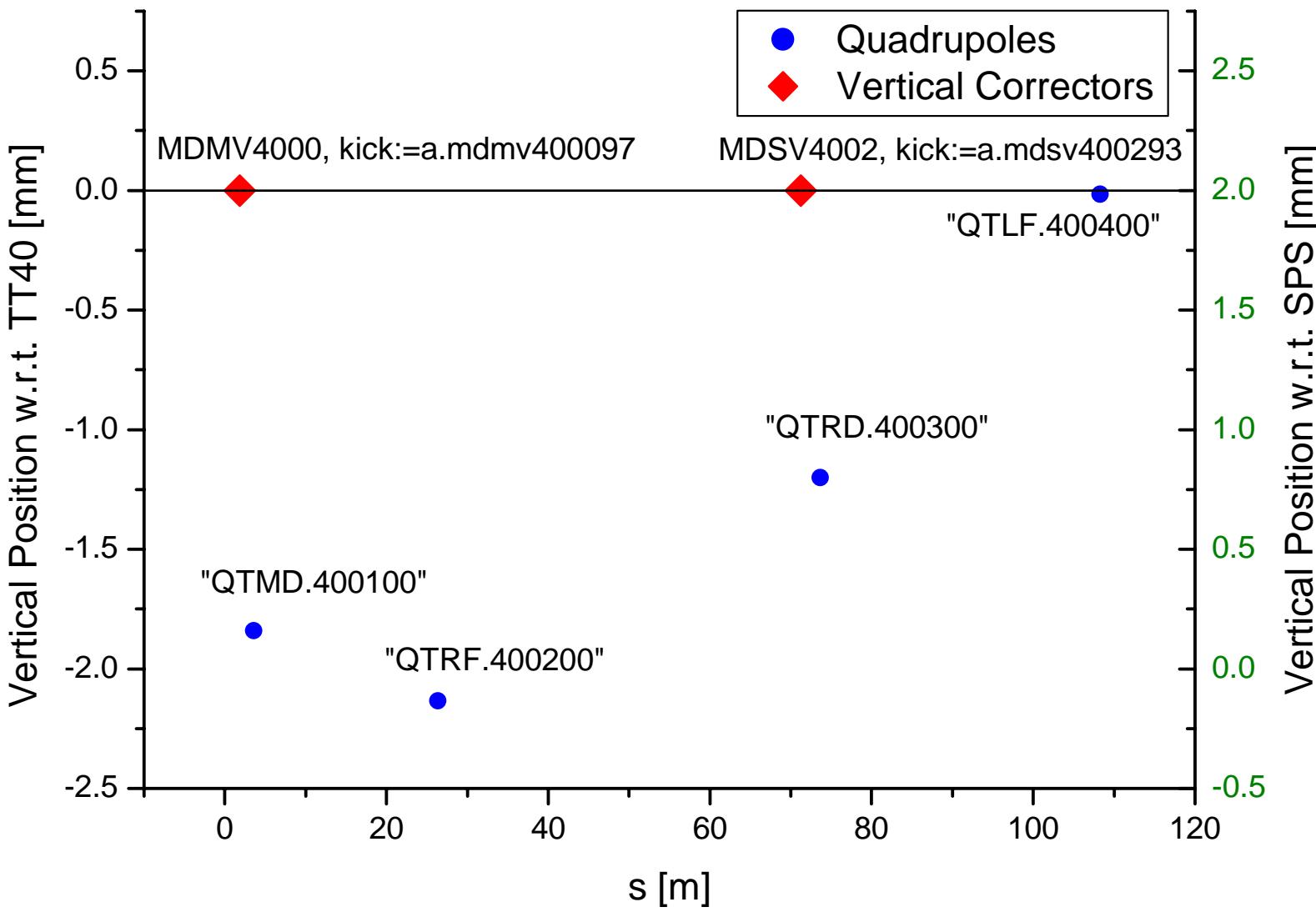


# Impact of quadrupole misalignment at SPS extraction on TI8 performance (dispersion in particular)



# Impact of quadrupole misalignment at SPS extraction on TI8 performance (dispersion in particular)

Using TI8/LHC Standard Optics V6.5, Checking effect of misalignments on dispersion at LHC injection point

Quadrupole misalignments at beginning of TI8

(for details see [http://slap.web.cern.ch/slap/LOC/LOC\\_meetings/2006/220506/ltc1.pdf](http://slap.web.cern.ch/slap/LOC/LOC_meetings/2006/220506/ltc1.pdf))

// Optics at LHCINJ.B2 with misaligned quads, ORBIT CORRECTED

```
x = 7.90037324707288e-10 ;  
y = 1.72350441090634e-10 ;  
Dx = 5.67350472874152e-02 ;  
Dy = 1.38708428202649e-03 ;  
Dx - Dx = 7.75625474662076e-05 ;  
Dy - Dy = -1.24257324274404e-03 ;
```

Needed kicker strengths to correct orbit

```
a.mdmv400097 = 8.91752895448568e-06 ;  
a.mdsv400293 = -3.05462126852468e-06 ;
```

