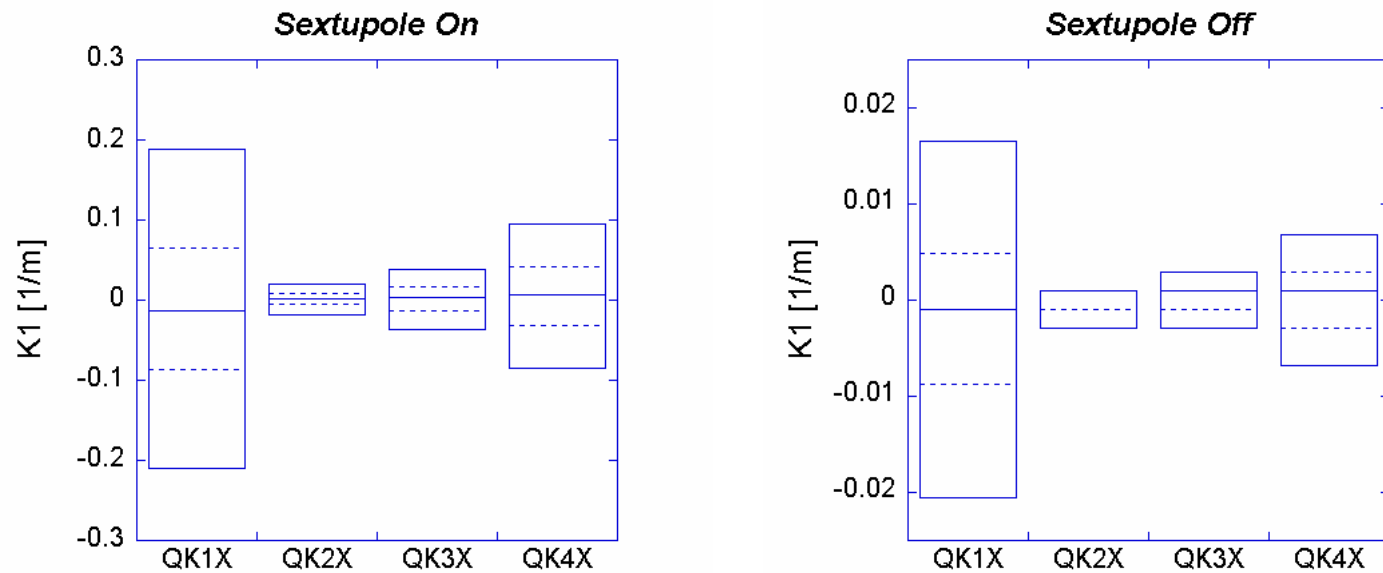


Homework ...

Same simulation was done
to be tuned off all the sextupole components
at ATF2 new extraction line.

- Errors ; 0.3mrad for all QF*X, QD*X
- Coupling correction with local bump
- Betatron coupling correction
by minimizing the beam size at wire scanners

Result of simulation



Strengths of the skew quadrupoles were reduced **by 1/10**.

Main coupling source was **vertical offset at sextupoles and bends**.

*Strength of the sextupole components
at new ATF2 extraction line was large !*

Sextupole components for Bends

$$\text{SBH1X} \quad K2 = -0.365$$

$$\text{SBH2X} \quad K2 = +0.365$$

Sextupoles in extraction line

$$\text{SF1X} \quad K2 = +3.55$$

$$\text{SD2X} \quad K2 = -3.15$$

$$\text{SD3X} \quad K2 = +3.15$$

$$\text{SF4X} \quad K2 = -3.72$$

These large sextupole fields affects the betatron coupling,
even if the vertical orbit is only 1-2mm.