## **Timing Motors**

- lxt, txt and lxt\_ttc are all in seconds!!
- lxt laser (relative to X-ray)
  - lxt.mvr(): move laser timing relatively
  - o lxt.mv(): move laser timing absolutely
  - o lxt.wm(): where motor, check the motor position
  - lxt.set\_current\_position(#): set current motor position to #
    - When there is drift in the laser timing, where we see it on the time tool (the edge shifts), we should use lxt.mvr() to bring the edge back to the center of the time tool window, then use lxt.set\_current\_position(0) to zero it
    - We should NOT touch txt!!!
- txt time tool delay stage (relative to X-ray)
  - o txt.mvr()
  - o txt.mv()
  - o txt.wm()
  - txt.set\_current\_position(#)
    - Be careful with this! We should only zero txt once, when we found the t0 at both the IP YAG and TT YAG.
    - We should never zero it after this if there is no change in the laser path length!!
- txt.motor actual motor, unit in mm, we usually don't use this one
  - txt.motor.wm() = txt.get()[2][0], returns the current motor position in [mm], only use this for sanity check, especially during the t0 shift procedure
- lxt\_ttc
  - o Combination move of lxt and txt, so that when we move Vitari timing, the time tool edge stays in the same position
  - It has all the same methods as lxt and txt