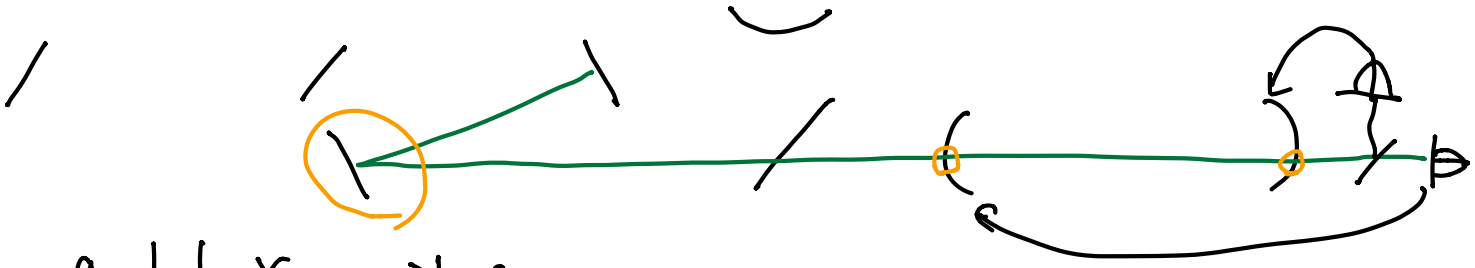
IFO alignment

1. Xarm (Gr)



a. lock Xarm with green

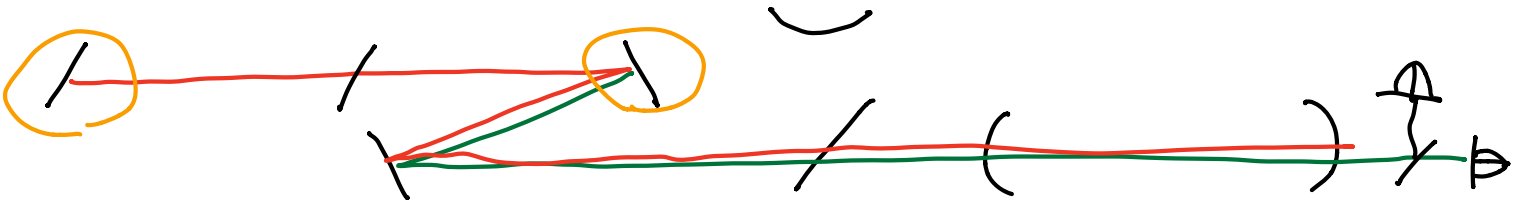
(b-0 Center the beam position on ITM, ETM with camera. Take reference of TMS QPDs

b. engage TMS QPD loop

c. dither PR3 and maximize GR TRANS

(c-1. move in-vac pico before PR2 if GR TRANS is too low)

2. Xarm (IR)

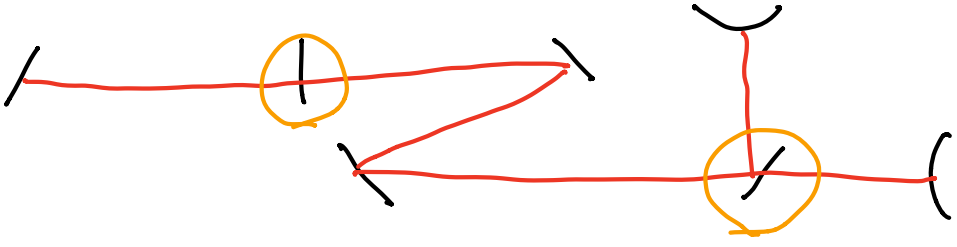


a. Dither PR2, IMMT2 and maximize IR TRANS

Notes.

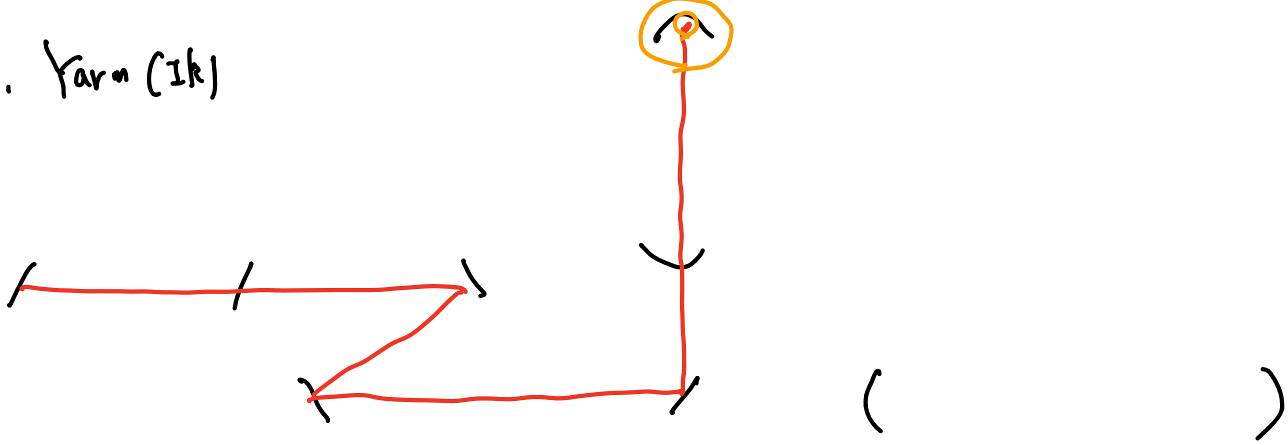
1. IMMT2 and PR2 are almost degenerated. We often skip the IMMT2 alignment.

3. PRMI



a. Dither PRM, BS and maximize POP90

4. Yarm (IR)



a. Dither ETMY and maximize Yarm TRANS

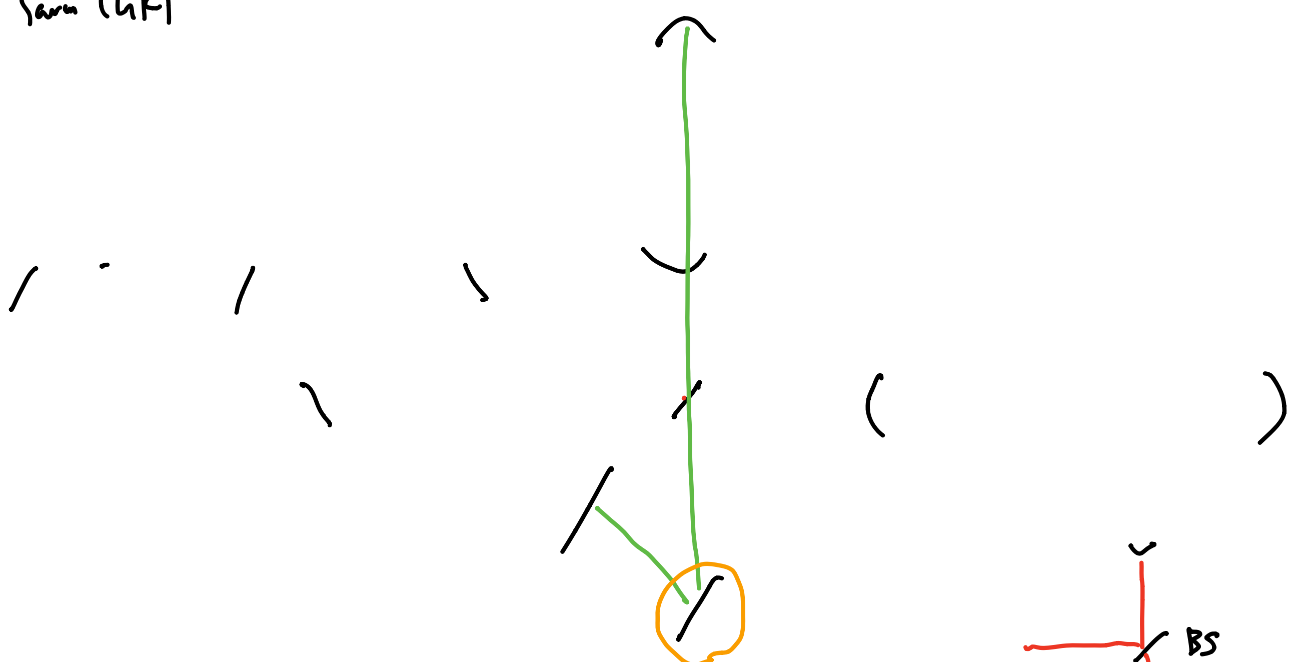
b. check beam position on ETMY. If too far from center, move ITMY to center it.

c. If ITMY was moved, go back PRMI alignment

Note: Yarmで先にalignmentした場合 (BS, ETYを使って). PRMIのalignmentがあまりうまくいかなかった.

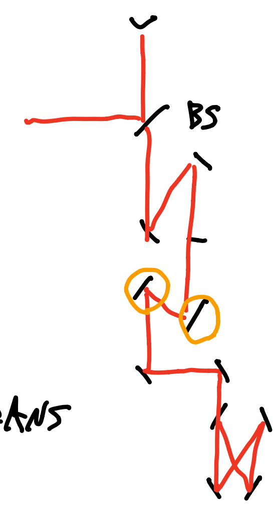
MICHがまっになない. (フリンジが)

5. Yarm (GR)



a. Dither SR3 and maximize GR TRANS.

(b. If TRANS is too low, move in-vac pico)



6. OMC

Dither OMMT 1, 2 and maximise OMC TRANS with single bounce from ITMY.

Notes: 1. We cannot gain the BPC error signal with single arm lock (both of IR and QR). (maybe due to freq. noise)