

Priorities for further work (not ordered)

1. Simulate feasibility & accuracy of multi-wire 2D and 4D sigma matrix reconstruction in new ATF2 EXT line, in the presence of errors and input phase space distortions (use file with 500 DR seeds from Kubo-san and / or examples of 4D envelope from Mark's MAD DR model) (Julien, Tony,...)
2. Work out 4D sigma matrix reconstruction from combination of normal & skew quad scans, using measurements with y-size and inclined wires; simulate feasibility & accuracy as above (Cécile, Shigeru, Philip,...)
3. Idem, but using OTR 2D profile for vertical and tilt as function of normal and skew quads – which improvements to the setup would be needed for fast procedure ? (Cécile, Shigeru, Glen,...)
4. For both methods, investigate ability to correct using set of skew quads; limitation from having - optimize with - only 2 skew quads available initially (Mark, Okugi-san + commissioning group,...)
5. Continue to explore adding additional sources after QM7R to explain the emittance growth beyond OTR, at wire scanners (Mark,...)
6. Injected EXT trajectory correction and feedback (Glen, Yves,...)
7. Intensity dependence ?
8. Implementation in Flight Simulator → tasks list @ FS workshop next week
9. Ability to absorb QM7 gradient error in EXT for different assumptions of this error and, more generally to absorb input betatron miss-match (Mark, Julien,...)