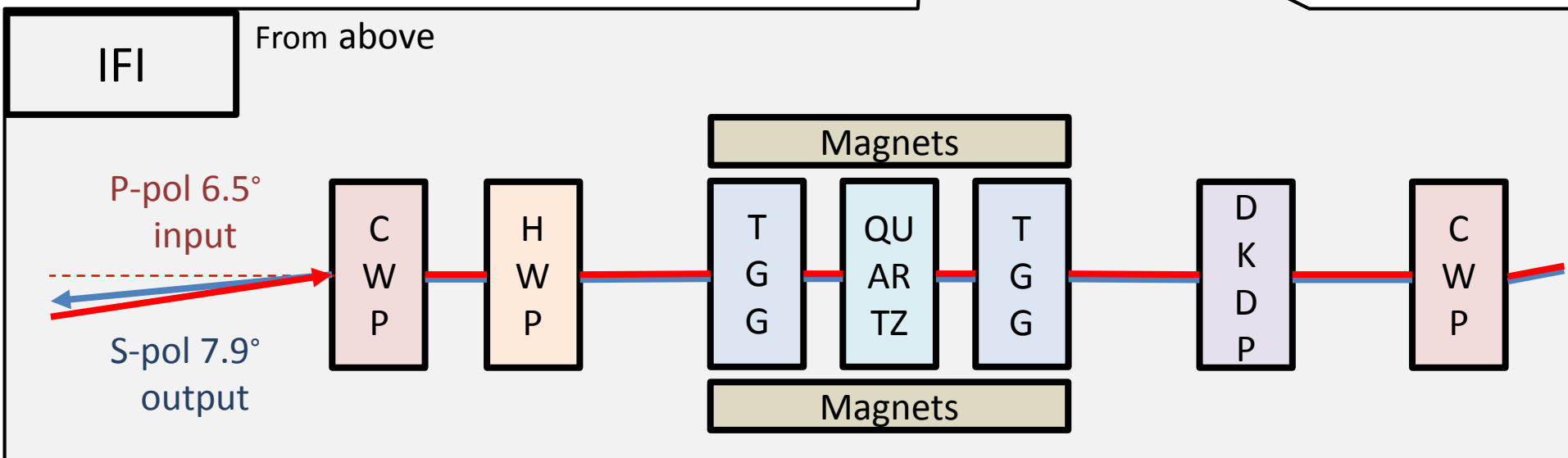
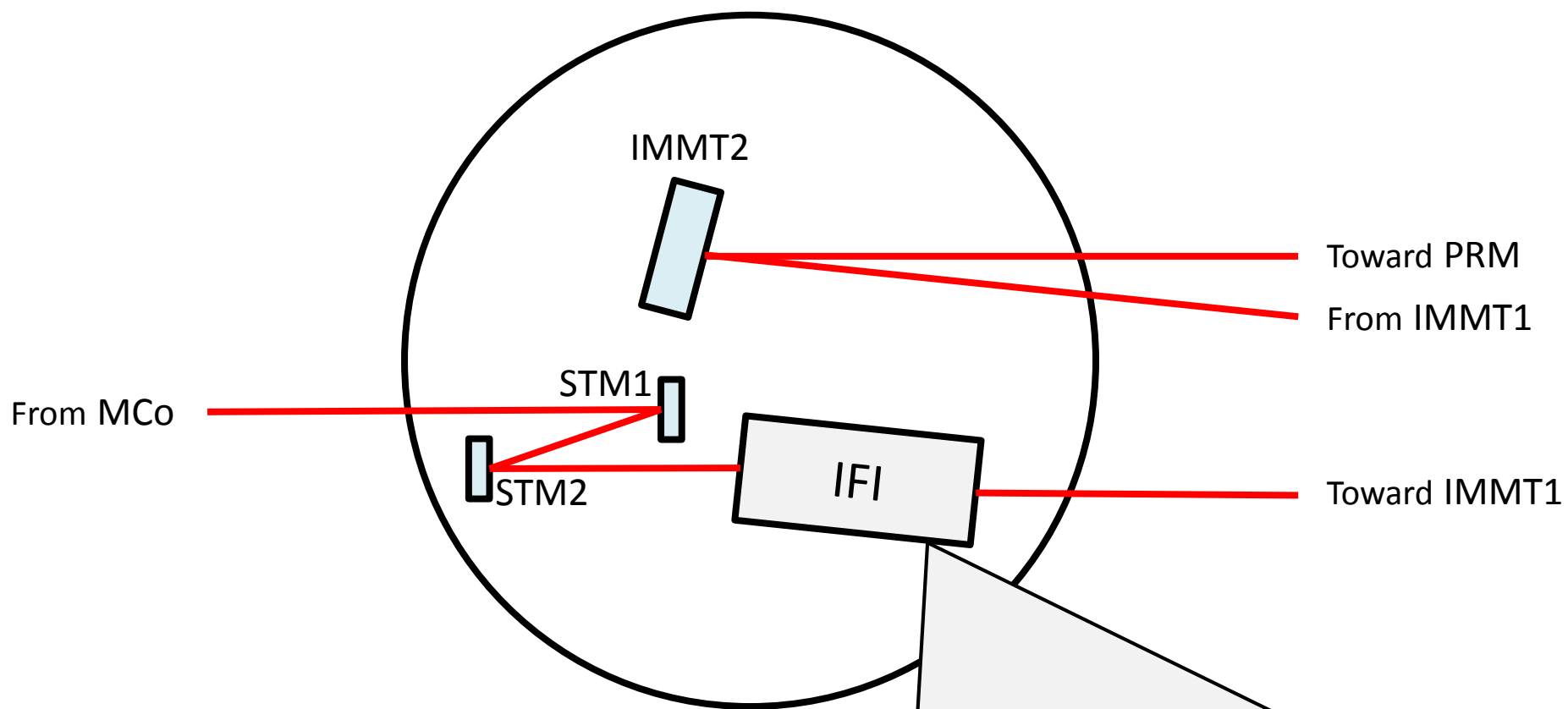
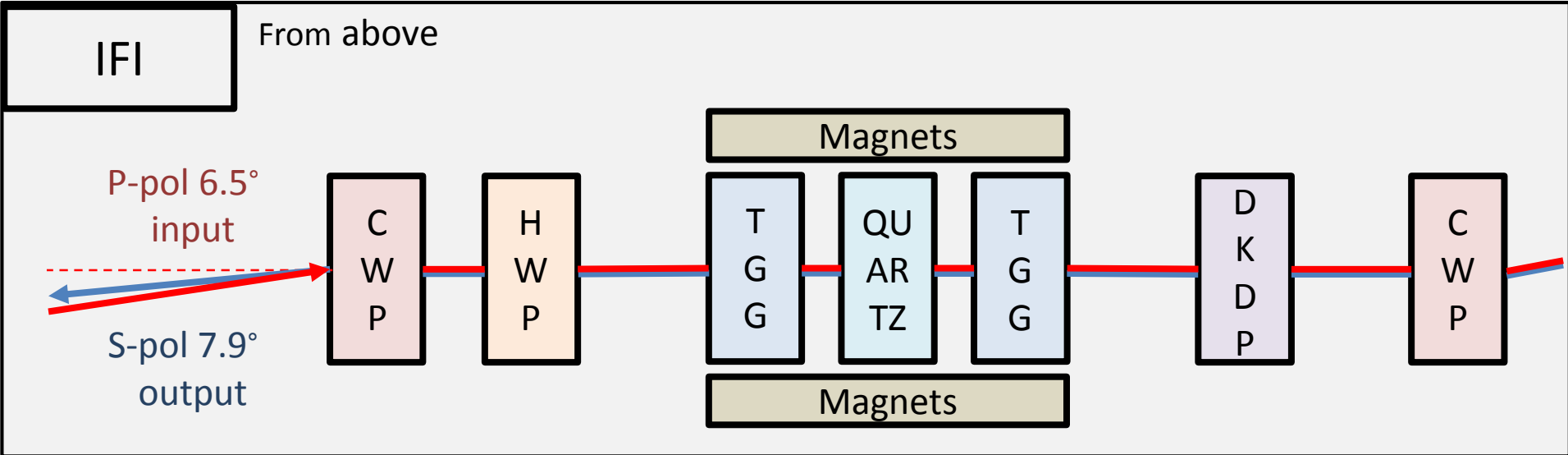


IFI parameter and ghost beams

12/19 2014

Yano Kazushiro



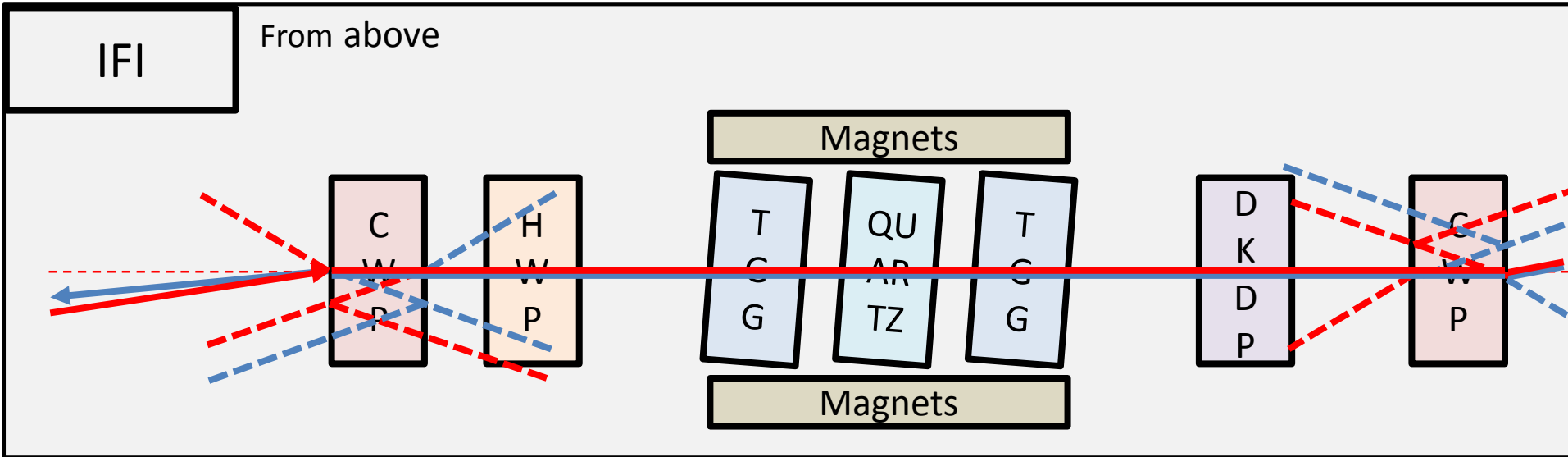


Parameter

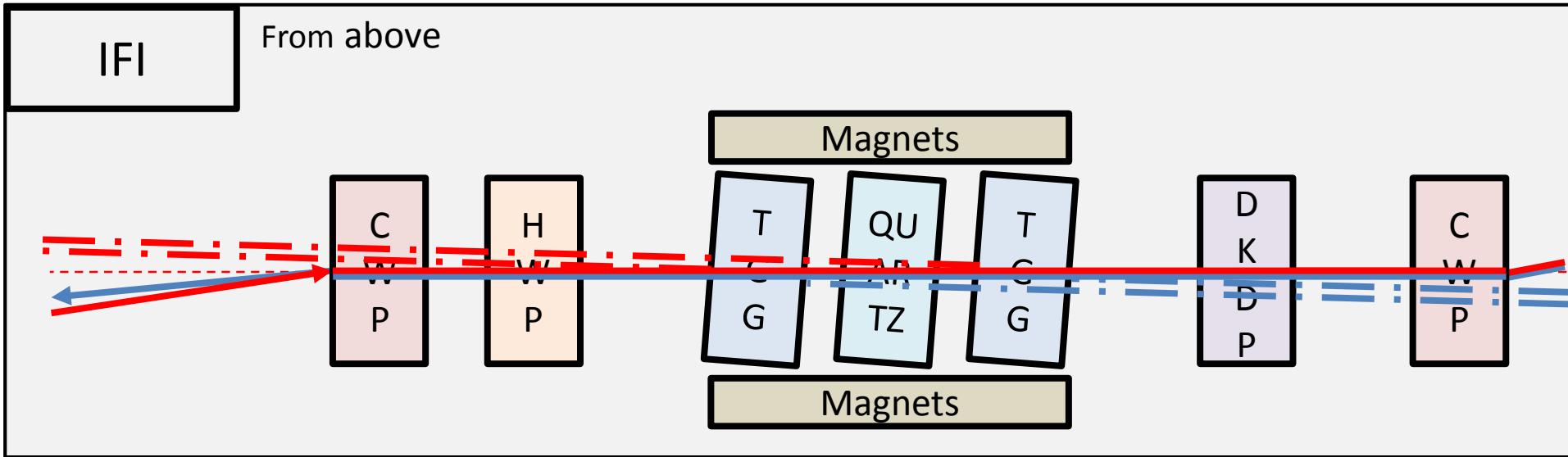
	Diameter [mm]	Thickness [mm]	Reflectance* [ppm]	Refractive index
CWP	25*25 (trapezium)	3 ~ 6.825	≤1200	S:1.6424 P:1.4797
HWP	25.4	1.8	≤300	o:1.5341
TGG	20	10.41	≤1500	1.9437
QUARTZ	20	10.69	≤500	1.5340
DKDP	25.4	3	≤1500	o:1.4931

*The real reflectance is lower than these demand levels on specification.

Ghost Beam from CWPs ($\sim 1.0e-06$ power times of input)

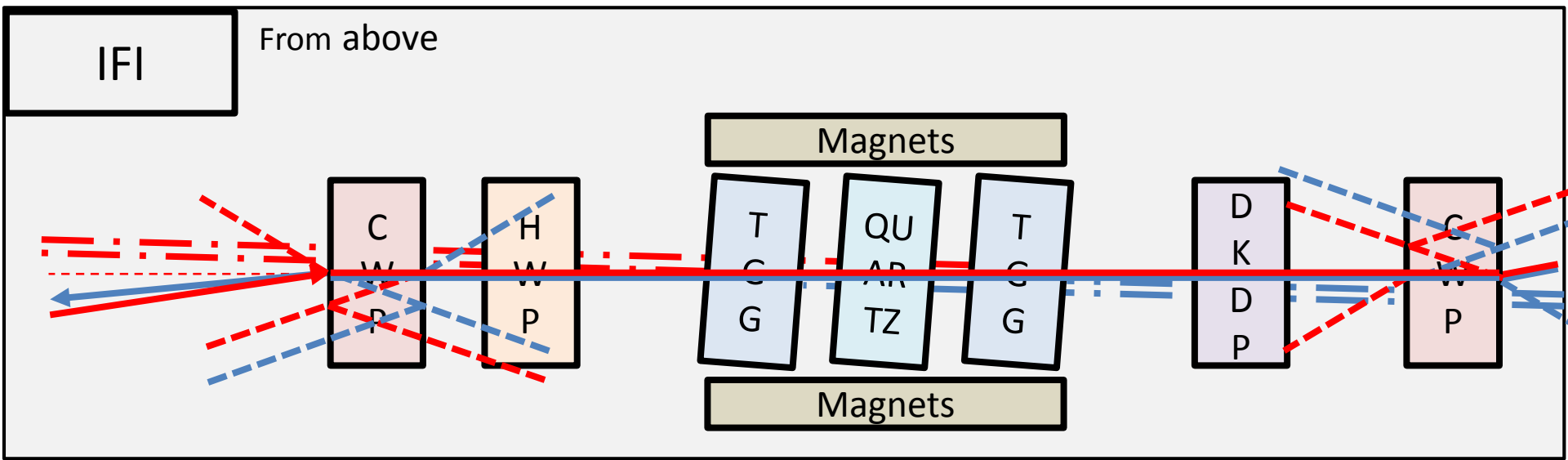


Ghost Beam from TGGs



Holders of TGGs and QUARTZ are adjusted by rotating a little.

Ghost Beam from CWPs and TGGs ($\sim 1.0e-06$ power times of input)



- 6 baffles are necessary at least to cut the ghost beams. 4 are for CWPs, 2 are for TGGs.
- We already have 3 baffles which are designed for aLIGO.

