Discussions on XRP settings 2017

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Points for discussion

- In 2016, roman pots set at minimum distance of 15 σ from the beam
- If optics is changed to have very small β-function at roman pot, need also tolerances in mm
- Margin should cover for asynchronous dumps and tertiary halo
- For discussion:
  - Assume 3 σ retraction from TCTs + 300 um (in local σ)
  - Assume minimum absolute setting of 1.5 mm
    - Compare: minimum achieved in 2016 was 1.8 mm
- Open point: would we need to move in TCLs if roman pots go in further?

Roman pot settings

- With above proposal, mm settings for different ATS optics versions compared with nominal 2016

	mm gaps nominal 2017	mm gap ATS 33 cm, TCT@7.5	mm gap ATS 40 cm, TCT@9.5	mm gap ATS 40 cm, TCT@9.0	nom. 2016 15 sig gap (mm)	gap ATS2017/nominal2016, 33cm	gap ATS2017/nominal2016, 40 cm	gap ATS2017/nominal2016, 40 cm 9 sigma
XRPH.C6R5.B1	2.16	2.94	3.11	3.00	3.19	0.92	0.97	0.94
XRPH.D6R5.B1	1.50	2.06	2.24	2.16	2.16	0.95	1.04	1.00
XRPH.A6R5.B1	1.50	1.83	2.00	1.93	1.87	0.98	1.07	1.03
XRPH.E6R5.B1	1.50	1.77	1.94	1.87	1.80	0.98	1.08	1.04
XRPH.B6R5.B1	1.50	1.50	1.59	1.54	1.50	1.00	1.06	1.03

- Not included in table: settings for nominal 2017
  - Generally better, down to 1.5 mm