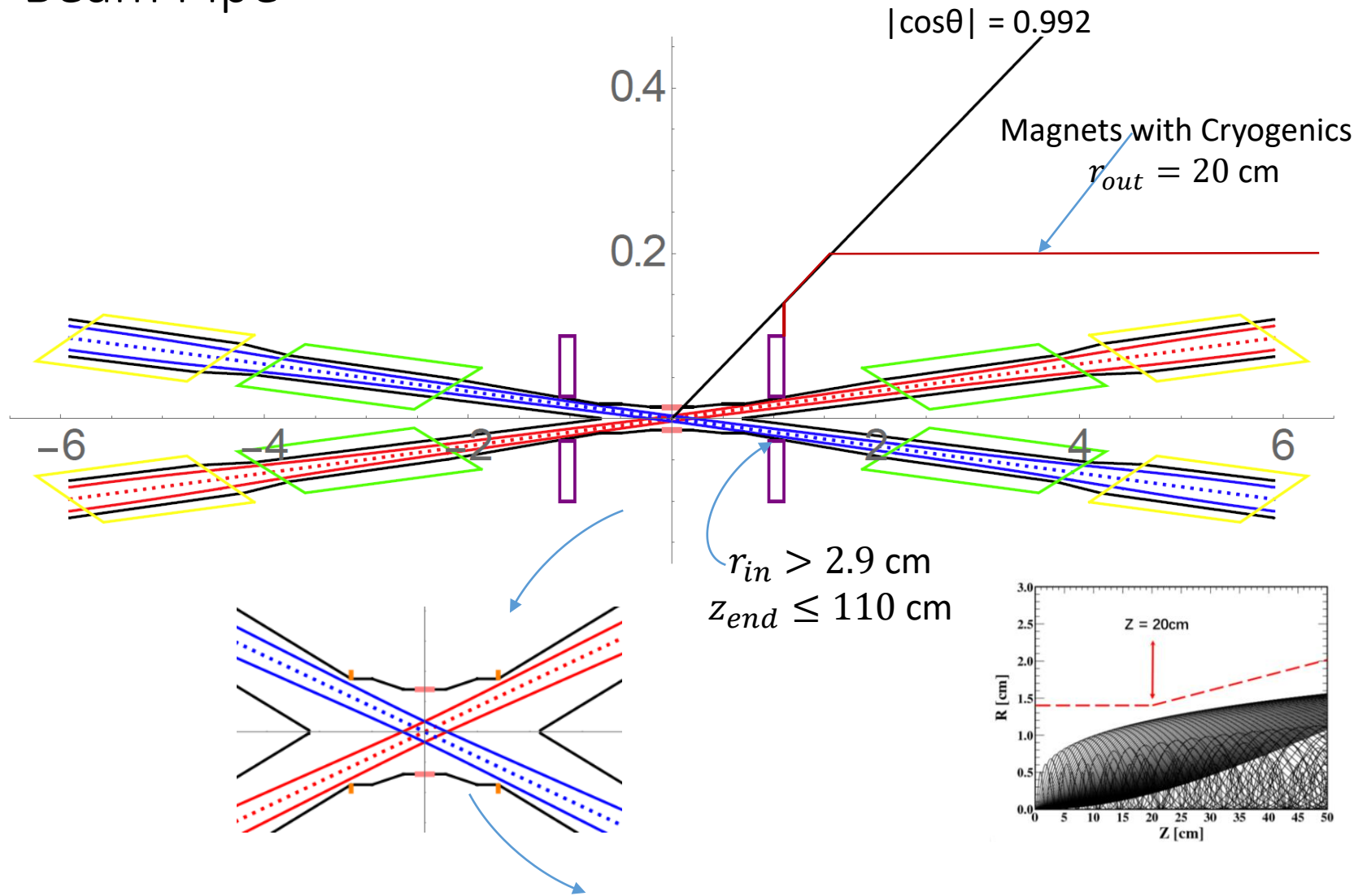


MDI Status Report

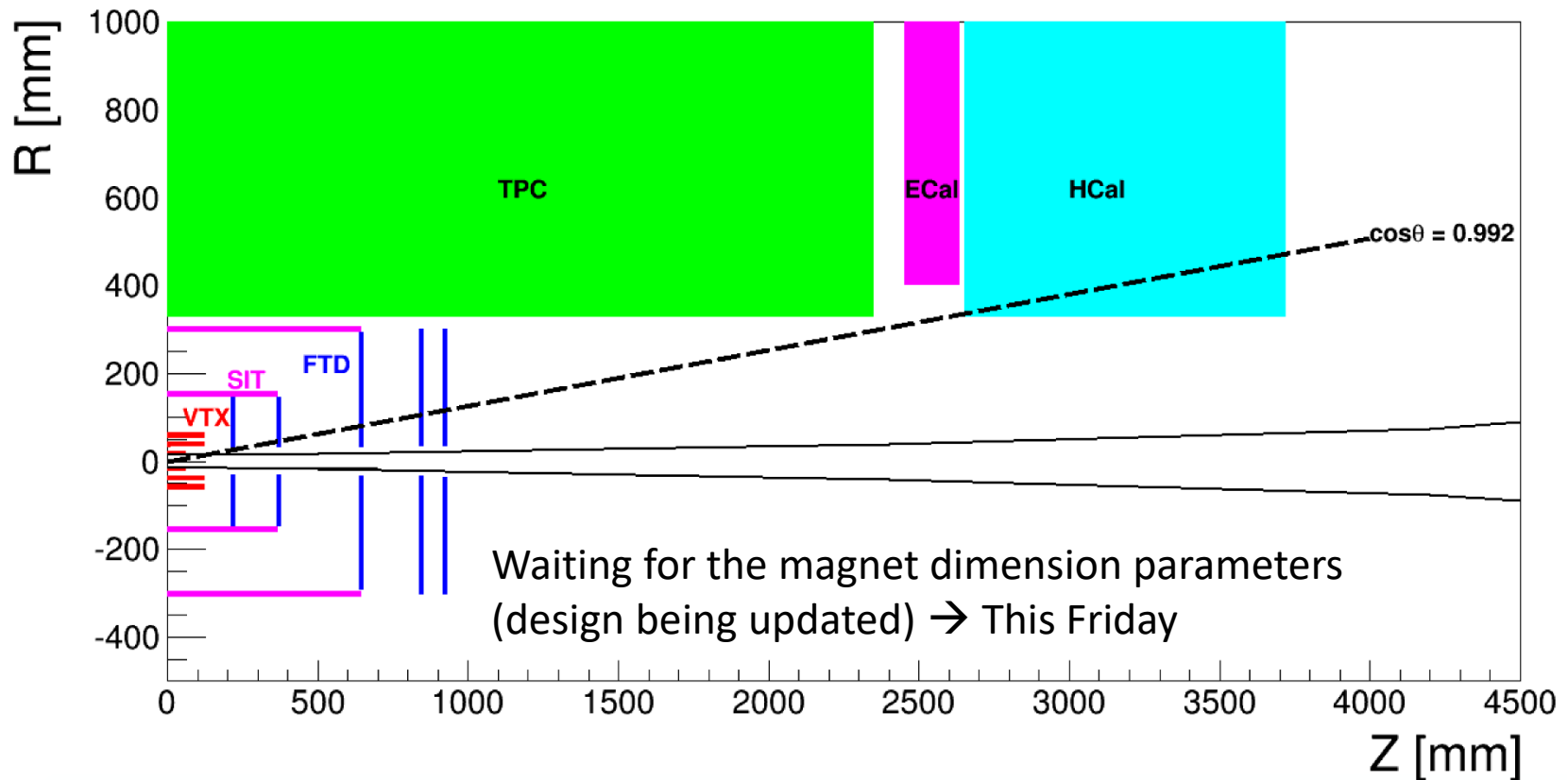
Hongbo Zhu

27 September 2017

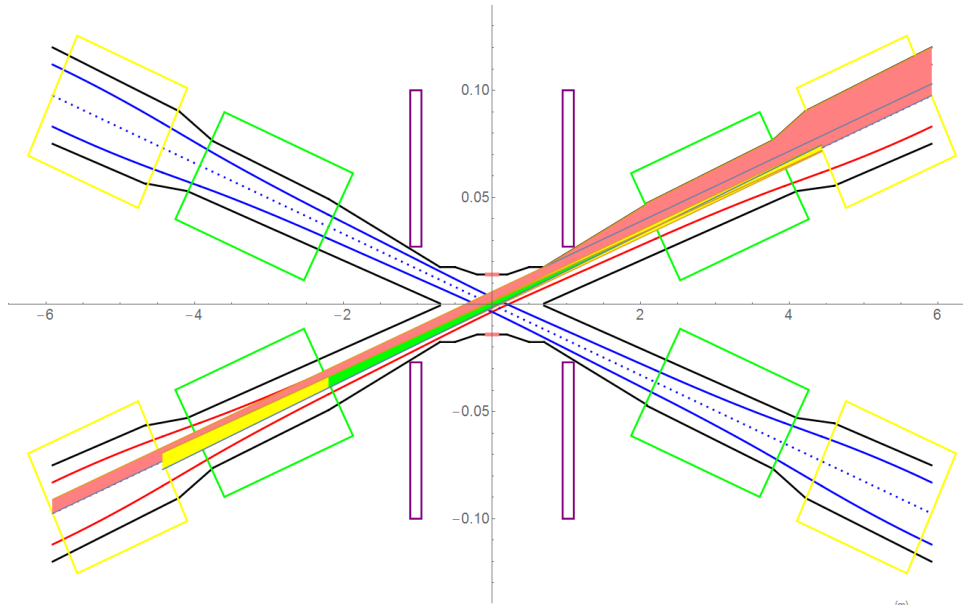
Beam Pipe



Updating the IR



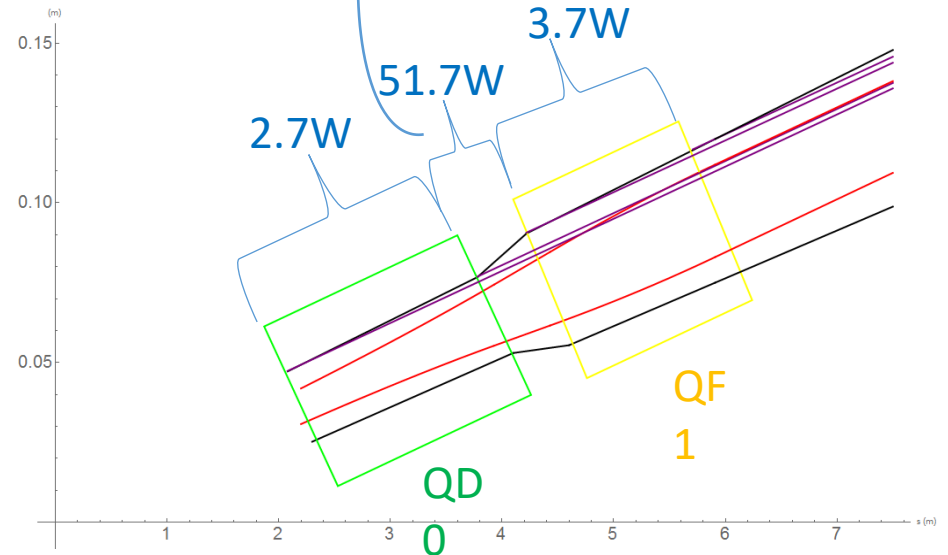
Synchrotron Radiation



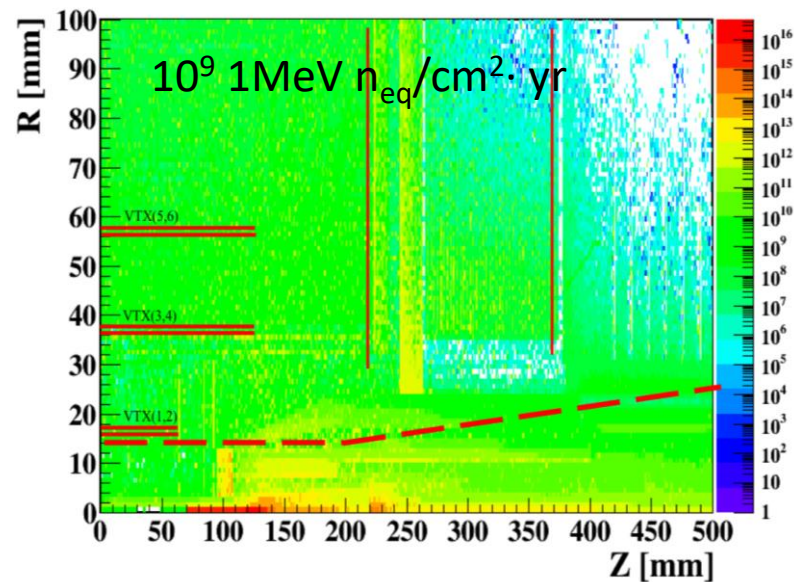
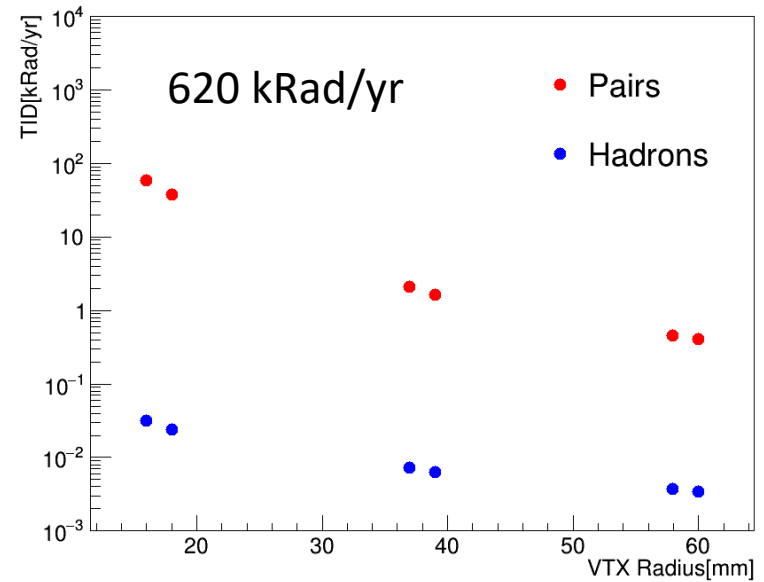
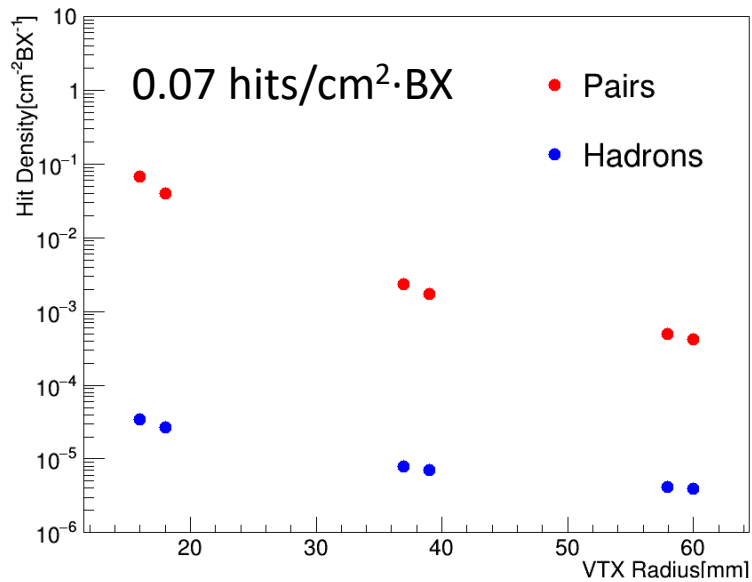
K. Li has started to run BDSim to cross-check the power deposition and produce SR photons in IR for detector backgrounds.

S. Bai (acc.)

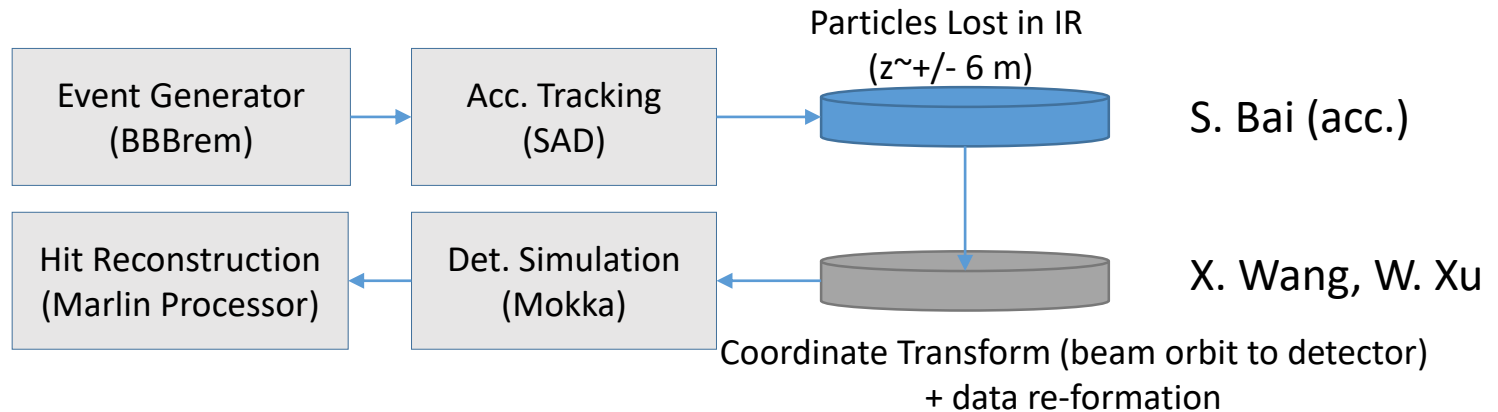
Cooling required



Beamstrahlung

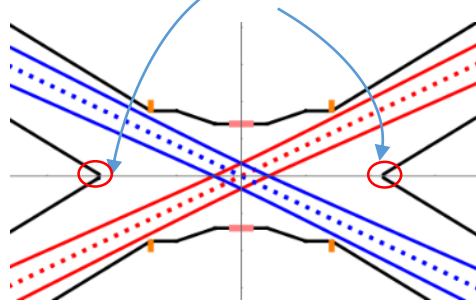


Radiative Bhabha Scattering



- Data files produced with latest lattice design received (and with & without collimation, effects to be evaluated)
- Geometry bug being fixed (C. Fu)

Particles trapped in the adjacent area



LumiCal

- Bi-weekly discussion meetings (IHEP-VINS-SINCA) called by K. Zhu → well organized, frequent and fast information exchange

To control individual systematic uncertainty to achieve the ultimate 0.1% precision

LumiCal regular meeting
Friday, September 1, 2017 from 14:00 to 18:00 (Asia/Shanghai)

Friday, September 1, 2017

14:00 - 14:30	Luminosity error due to the electron theta measurement 30' Speaker: Suen Hou (SINICA) Material: Slides
14:30 - 15:00	Update on the generator level studies of the systematic uncertainties 30' Speaker: Strahinja Lukic (Vinča Institute of Nuclear Sciences, Belgrade) Material: Slides
15:00 - 15:30	Preliminary result of Clustering Algorithm for LumiCal 30' Speaker: Liu Yang (高能所) Material: Slides

Event reconstruction

LumiCal regular meeting
Friday, September 15, 2017 from 14:00 to 18:00 (Asia/Shanghai)

Vidyo Info	Room Name	LumiCalOfCEPC
	Link	http://vidyo.ihep.ac.cn/flex.html?roomdirect.html&key=38Ljgcqk8L2hWh4aRleicj3yZgY
	Extension	
	PIN	2017

Friday, September 15, 2017

14:00 - 14:20	Forward region as an input to the CDR 20' Speaker: Strahinja Lukic (Vinča Institute of Nuclear Sciences, Belgrade) Material: Slides
14:20 - 14:40	Lumi Tracking precision, adding a Vertex calibration ring 20' Speaker: Suen Hou (高能所) Material: Slides

Detector design considerations

To write short (CDR) and long notes (supporting note), structure and pages (level of details) to be decided this Friday

Other Items

- Magnets (compensating and final focusing magnets) design → Acc.
- Beam monitor → diamond/ZnO to measure radiative Bhabha at zero-photon scattering angle, or integrated with the LumiCal (S. Hou)
- Mechanical supporting structure, beam pipe, integration ... → not covered

CDR Writing

- Just started ... can provide the skeleton with minor texts to describe each relevant item this week