IR issues	JLC	NLC	tools	R&D other choices
Superconducting compensation magnet	must	must (permanet magnet has no advantage with this?)		thinner cryostat for smaller dead cone
Detector solenoid	2 Tesla	4 Tesla, even higher 20mrad crossing angle OK?	GEANT	Optimization of mag. field, calorimeter performance
Support of FF-Q vibration	support tube no additional "anchor" is necessary at TRISTAN tunnel.	optical anchor compact detector with support tube (grounded)	ANSYS	their prototypes calculations with measured ground motion.
Feedback Slow feedback(SLC type)	**collisions:** can be corrected at <10Hz with BPM by using beam-beam deflection. O(nm) ground motion at >10Hz..... 5% lum. loss **nm beam spot size:** needs orbit correction by 10nm-res. BPMs	Slow feedback(<10Hz) fast feedback(2.8ns, <200Hz) by BPM with pilot beam and also by beam beam deflection.	SAD,TURTLE, MERLIN,CAIN	SLC and B-factory's experiences feedback simulations 10-100nm resolution BPM.
Synchrotron radiation (SR) background	no problem because of collimation and mask (for that from last bend).	similar to JLC but... needs recalculation	MQRAD QSRAD GEANT	SLD experineces, that is large fluctuation of the background in CDC. What is a stability of beam?