PARTICLE PHYSICS PROJECTS RISK PROFORMA													
Def	Bick Description	Detential impact on project	Inhor	ant Dial	k Saar	Evicting Controls	Mitigating factors	Deald			Commont	Cost if rick realized	Dropood Action
Ret	Risk Description	Potential impact on project	Inner	ent Risi	K SCOR	Existing Controls	Mitigating factors	Resid	uai risi	score	Comment	COST IT FISK realized	Proposed Action
WP1.1	Failure of ECAL wafer fabrication	Loss of some ECAL layers leading to less useful data	2	2 2	4	Non-UK: Sourcing wafers from four manufacturers	All layers populated but only 2/3 complete transverse.	2	1	2	Retired Apr 2007	None	
WP1.2a	Failure of AHCAL system	Loss of data for simulation comparisions	2	2 2	4	Non-UK: Technical Board reviews every six months	System already running and test beam data taken	1	2	2	Retired Apr 2007	None	
WP1.2b	Failure of DHCAL systems	Loss of data for simulation comparisions	3	3 1	3	Non-UK: Technical Board reviews every six months		3	1	3		None	
WP1.3	Extended beam test period required due to problems with calorimeters, beams or DAQ	Higher travel costs	2	2 1	2	Thorough testing of equipment before shipping. Visit beam areas and understand environment before beam test	We have budgetted for around £1k/week for the beam test	4	2	8	Delay and additional running almost certain	£30k	
WP2.1	Failure of VFE ASIC production so no chips available for PCB test	Non-verification of ASIC by time of TDR	1	2	2	Non-UK: Review ASIC design before each fabrication round		1	2	2		None	
WP2.2	Not able to find manufacturer for 1.5m PCBs	Study not completed in time for TDR	2	2 2	4	Investigate several PCB manufacturers	Rely on smaller PCB stitching techniques, which may become the baseline in any case	2	2	4		None	
WP2.3	Delays in sourcing off- detector receiver components	Delays in tests	1	2	2	Consider alternative components and/or suppliers	Continue work with partially completed engineering version of boards	1	2	2		None	
WP3.1	Failure of sensor fabrication round	Three to four month delay in schedule and extra cost to remake	2	2 2	4	Regular design reviews according to ISO9000 specifications	Prepare tests before fabrication complete so major errors can be identified immediately	2	2	4		£80k	
WP4.1	Failure to develop suitable techniques for large-scale assembly	UK does not construct detector	1	5	5		Feed back to electronics/ mechanical designers to modify slab design to simplify assembly	1	5	5	Added Nov 2006	None	
WP5.1	No significant use of UK algorithms outside UK	Loss of influence/leadership in medium term	2	2 2	: 4	Ensure algorithms widely used by UK groups, increases exposure	UK groups work well together and collaborate with groups around world	1	1	1	PFA now de facto standard	None	
WP5.2	UK studies make no significant impact on overall detector design	Loss of influence/leadership in medium term	2	2 2	4	Ensure studies performed are written up and included in detector concept reports	Process already started, e.g. for LDC	2	2	4		None	
All.1	Delays/problems with RA	Less impact on projects	2	2 1	2	Schedule recruitment	All new project RAs are now in post	2	1	2	Retired Jan 2007	None	
All.2	Loss of staff with required skills	Loss of expertise mid-way, causing delays	3	3 2	6	Ensure personnel work closely with other UK colleagues so no one individual alone has critical knowledge	People in post can step in	3	1	3		None	
All.3	Illness of staff in critical positions	Reallocation of effort causing delays	2	2 2	4	As above		2	1	2		None	
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	High risk is a score greater that	an 8											
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	Thursday, May 17, 2007			+					<u> </u>	<u> </u>			