

# **Response to PPESP questions regarding academic support for “A Fast Track Trigger with High Resolution for H1”**

H1 Collaboration

Proposal 750

The Universities of Birmingham, Lancaster, Liverpool and Manchester,  
Queen Mary and Westfield College of the University of London  
and the Rutherford Appleton Laboratory

with

RWTH Aachen (I and III Institutes), Humboldt University Berlin, Universities of Brussels, Cracow and Dortmund, CEA Saclay, DESY Hamburg, DESY Zeuthen, Universities of Hamburg (I and II Institutes) and Heidelberg, MPI Heidelberg, Universities of Kiel, Košice and Lund, CPPM Marseille, ITEP Moscow, LPI Moscow, MPI Munich, LAL Orsay, Ecole Polytechnique, Universities of Paris VI and Paris VII, Institute of Physics, Czech Academy of Sciences, Prague, Nuclear Center, Charles University of Prague, University of Rome, PSI-Villigen, University of Wuppertal, ETH Zürich and University of Zürich.

In the PPESP meeting on 31<sup>st</sup> January 2000 the Panel asked to be reassured that the FTT project had sufficient underpinning from all UK groups and wanted to see an academic staff profile over the duration of the project.

Firstly the H1 UK groups all fully support the FTT project.

For the academic staff profile the relevant parts of the ‘Forms X’ in the recent Particle Physics Grants Review reports are summarised in Tables 1 and 2, along with further qualification of the fraction which, in Table 1, will be directly associated with the implementation of the FTT or, in Table 2, will be associated initially with the implementation and then exploitation, for the permanent HEFC funded academic staff and PPARC fellows at the various UK Universities.

For the groups initially involved in the implementation of the FTT the fraction of time spent on the FTT is stable over the next few years, whereas those groups not initially heavily involved in the implementation of the FTT upgrade show a marked increase into the exploitation phase, with it being recognised that after the upgrade all H1 UK physicists will be working with the FTT as it is essential for H1 bulk precision physics and the UK physics programme outlined previously.

The H1 UK collaboration is committed at a high level to all aspects of the H1 programme at HERA II (HERA upgraded for high luminosity). A major part of this commitment is inevitably with the H1 triggering upgrades, without which much of the more exclusive physics at HERA II is impossible. The contribution of H1 UK to the H1 FTT as part of this future programme of physics is both essential and substantial for H1 and HERA II physics. It is demonstrably well supported by the collaborating institutes in the UK at all levels.

Institute	Staff member	2000/2001	2001/2002	2002/2003	2003/2004
Birmingham	Dowell JD	20 (10)	20 (10)	0	0
	Garvey J	10	10	10	0
	Kenyon IR	25	25	0	0
	Newman PR	100 (50)	100 (50)	100 (50)	0
Manchester	Marshall R	20 (5)	20 (5)	20 (5)	20 (5)
	Ibbotson M	20	20	20	20
	Cox B	80	80	80	80

Table 1 - Summary of percentage of their total time which will be spent on the H1 experiment over the next few years for HEFC funded academic staff and PPARC fellows at Universities actively involved in the implementation stage with (in brackets) the percentage which will be directly associated with the implementation of the Fast Track Trigger.

Institute	Staff member	2000/2001	2001/2002	2002/2003	2003/2004
Liverpool	Dainton JB	70 (35)	70 (40)	70 (50)	70 (50)
	Greenshaw T	60 (0)	60 (10)	60 (20)	60 (50)
	Milstead D	70 (10)	70 (20)	70 (30)	70 (50)
QMW	Thompson G	70 (0 <sup>1</sup> )	70 (30)	70 (65)	70 (65)
	Eisenhandler E	5	5	0	0

Table 2 - Summary of percentage of their total time which will be spent on the H1 experiment over the next few years for HEFC funded academic staff and PPARC fellows at Universities not directly involved in the implementation stage with (in brackets) the percentage which will be associated with the implementation and then exploitation of the Fast Track Trigger.

---

<sup>1</sup> This assumes no direct QMW involvement in the implementation of the FTT, although this is still under discussion.