UK LHC COMMUNICATION PROJECT – STATUS AT SEPTEMBER 2006

The UK LHC Communications Manager (Dr Ray Mathias- RJM) has been in post since June 2006, working 3 days/week.

The LHC Promotion Strategy identifies nine general activities of use in promoting the LHC, and three more have been added since the appointment of the LHC Communication Manager. The timetable of work fits with the announced LHC timetable – startup in November 2007, full-energy science runs early/spring 2008, possible early science results summer/autumn 2008.

1. Formative evaluation:

A specialist science policy consultancy (People Science and Policy Ltd) was contracted to conduct face-to-face interviews and focus groups with the three main audiences (school students, teachers and interested public) identified in the Promotion Strategy. A draft report has been delivered, and the final report will be ready by mid-October. The report will inform our communication strategy by giving us important information on what engages teachers, students and the public about the science and issues around the LHC. PPARC hopes to publish the report on its Website.

Some main feedback points [preliminary] for the UK effort are Public

- focus communications on the Big Bang and the origin of the Universe
- terms such as 'particle physics' not recognised try not to use
- PPARC should explore televisual opportunities
- People interested in the development of the project, as well as the science outputs afterwards
- 'Handles' identified such as 'Questions Einstein Couldn't Answer', 'Biggest Experiment Ever'
- In terms of spin-offs, medical applications were by far the most interesting (eg over engineering developments); quite a challenge in explaining how the GRID might affect society (seen as just for professionals)

Teachers

- Develop/sponsor teaching materials teachers (esp of 16-18 year olds) do want these
- Use LHC as a means to provide access to 'real scientists'
- 'Attoworld' school theatre idea not so welcome as well illustrated schools' lecture with researchers present
- PPARC should actively recruit 'teacher champions'

2. TV and radio coverage:

RJM and the PPARC media team are using their contacts to access key people at BBC, Horizon, Discovery Channel and Channel4 to encourage coverage of the LHC project. Nearer start-up we should conduct a similar exercise with radio features editors eg. *The Material World*. Radio 4 have agreed to do a whole day of broadcasting from CERN next year. We may commission additional film and interviews, with a UK perspective, to supplement materials that CERN are routinely providing.

3. Schools programme:

This programme will support science teachers in using the LHC project in schools. We are preparing three posters and an 8-16 page booklet for teachers/schools as 'teasers' for the start-up of LHC, ready for the UK science teachers' Annual Meeting in January 2007. Subsequently a range of posters, leaflets and web-based materials will be produced. A touring schools lecture will be developed, possibly in partnership with the Institute of Physics. Development courses and talks for teachers will be produced and a whole 'theme day' on LHC at the teachers' meeting 2008 will be organised.

Partnerships with the UK's Science Learning Centres are being developed to promote the LHC to teacher audiences. Visits to CERN for teachers and educators are being planned in collaboration with CERN's Education team.

We are in discussion with a UK television channel '*Teacher's TV*' and may commission three 15 minute programmes on particle physics and the LHC, also including the history of the subject (eg, the Curies work and its modern legacy).

4. Website:

A website dedicated to the LHC will be built, as a sub-site within the UK's PP programme area www.particlephysics.ac.uk The site will target non-specialists (including politicians, policy makers etc), teachers and students. We plan a distinctive style that retains elements of the existing PPUK site. Draft page designs and navigation have been produced. Consultations with a web design company are taking place. Once a rough draft is available this will be shared with the UK LHC Promotion Advisory Group. Planned launch for a basic site is January 2007, with a steady increase in pages/resources through 2007.

5. Touring Exhibition:

The Science Museum London have proposed an LHC-based exhibit in their Antenna exhibition area to run for 6 months from April 2007, then to visit four venues around the UK – probably in Science Centres. PPARC expects to sign a contract in October.

6. Public events across the UK:

The Promotion Strategy proposes eight public gatherings of scientists and general public to share the excitement of the LHC project. There are likely to be

many more opportunities than this if we exploit the UK's Science Centre and Café Scientifique networks, providing there is adequate support from the physics community. RJM and the GRID-PP outreach officer have discussed the possibility of Café Scientifiques around GRID conferences in UK next year (Brighton and/or Manchester). The PPARC event at the BA Festival 2006 "Secrets of the Universe" (including the LHC) had a capacity audience and Dr Brian Cox's Public Lecture was also well attended (about 180 in the audience). PPARC will be involved in a day at the BA Festival 2007 that will feature the LHC.

7. VIP receptions:

PPARC Corporate Affairs Group have a rolling programme of engagement with politicians and policy makers. A bid is being prepared to host a breakfast event for the Parliamentary Scientific Committee in Spring 2007, which would focus on LHC. Further political and media events will take place around start-up.

8. Support for journalists:

PPARC's media team have a rolling programme of taking journalists to CERN and briefing journalists about new developments.

This year (2006) 29 researchers will receive media training, and a further 24 will receive communication training (writing and presentation skills). In both cases this is an increase in numbers from 2005, reflecting efforts to encourage scientists to prepare for opportunities around the launch of the LHC.

PPARC Press and PR team have recruited a pool of particle physicists willing to talk to the media.

RJM is supervising a commercial photographer to take high-quality shots of UK produced equipment and people on the LHC project.

9. Publishing:

Materials are being published as part of the school's programme, at present.

Additional items.

10. Attoworld:

A proposal for a multimedia theatre event to tour schools. We are currently consulting experts who are reviewing the proposal and advising on likely budget, suitability, pitfalls etc. We are seeking specific information from teachers, re the suitability of this kind of activity, as part of the formative evaluation exercise. **Stop press** - the feedback from teachers is that they prefer a well-illustrated lecture with 'real researchers' to interact with students, so PPARC will not proceed with 'Attoworld'.

11. Royal Society Summer Exhibition

(London July '07 and Glasgow Sept '07). PPARC will bid for an LHC-focussed exhibit, in partnership with the UK PP community, at this prestigious event.

12. Royal Institution Christmas Lecture

RJM will 'pitch' a possible LHC/PP based Christmas Lecture for 2007 or 2008.

Two 'strategic' points

- We have found that helping almost anyone visit CERN has produced real benefit to this communications programme.
- We are talking to as many 'third party' organisations as possible, to encourage them to promote the LHC project – for example, learned societies, arts-science collaboratives, network of Café Scientifiques, etc. This would normally need to be in association with physicists.

Ray Mathias and PPARC, October 2006

Email: ray.mathias@pparc.ac.uk

T: 01760 440413 M: 07770 981655