

## PROGRAMMATIC REVIEW: FEEDBACK FROM PPAN

Feedback agreed for release by the PIs:

### ***Advanced LIGO***

The ranking reflected the recognition that this project has the potential for truly revolutionary, breakthrough science or already has an established track record for doing so.  
Category: **High Priority**

### ***ALICE and STAR***

The ranking reflects PPAN's concerns about the size and impact of the UK community in this area and its priority within the nuclear physics portfolio. The Panel noted that these projects came in to the review from different science areas (Particle Physics and Nuclear Physics) but with similar science goals. They may benefit in future from a coherent prioritisation within the Nuclear Physics area.

Category: **Lower Priority**

### ***ALMA Regional Centre***

The ranking reflects PPAN's view of this facility in support of ALMA which is a major, important project with significant benefit to the UK. PPAN noted that, as ALMA is under construction, science outputs cannot be included. This was also reflected in the ranking.

Category: **Medium-Lower Priority**

### ***Astrogrid***

The ranking reflects PPAN's concerns over delayed delivery and the impact of this on the level of community interest and involvement in the project.

Category: **Lower Priority**

### ***ATLAS***

The ranking reflected the recognition that this project has the potential for truly revolutionary, breakthrough science or already has an established track record for doing so.  
Category: **High Priority**

### ***Auger***

PPAN recognised that, while exciting science was being produced, the relevant UK community was very small.

Category: **Medium-Lower Priority**

### ***BaBar***

The ranking reflects PPAN's assessment that the project is coming to the end of its lifetime.

Category: **Lower Priority**

### ***Bepi-Colombo***

The ranking reflects PPAN's concerns over the priority of the science.

Despite the ranking, STFC understands that the provision of an instrument for Bepi-

Colombo is the subject of an MOU with ESA and there is no credible option for withdrawal.  
Category: **Lower Priority**

### ***BiSON***

The ranking reflects PPAN's concerns about the size of the user base and breadth of the science, though the science itself is recognised to be excellent.

Category: **Lower Priority**

### ***CALICE***

The ranking reflects PPAN's assessment of the priority of investing in R&D towards the ILC project. They note that they would have made this recommendation even if the STFC council decision on ILC had not already been taken.

Category: **Lower Priority**

### ***Cassini***

The ranking reflected PPAN's view that this was a high impact mission. Support is expected to continue at an appropriate level until the end of the project's lifetime.

Category: **Medium-Lower Priority**

### ***CASU/WFAU***

The ranking reflects PPAN's concerns over the impact of these facilities. The prioritisation excludes the ESO commitment.

Category: **Lower Priority**

### ***CDF***

The ranking reflected PPAN's view that, while this facility is nearing the end of its lifetime, there remained an opportunity for revolutionary, ground-breaking results.

Category: **Medium-Lower Priority**

### ***Clover***

The ranking reflected the recognition that this project was either currently delivering the highest quality results or was of the highest strategic priority for the future.

Category: **Medium-Higher Priority**

### ***Cluster***

The ranking reflected PPAN's view that this was a high impact mission. Support is expected to continue at an appropriate level until the end of the project's lifetime.

Although the mission was nearing the end of its lifetime, there was still an opportunity for new results.

Category: **Medium-Lower Priority**

### ***CMS***

The ranking reflected the recognition that this project has the potential for truly revolutionary, breakthrough science or already has an established track record for doing so.

Category: **High Priority**

### ***Dark Energy Survey***

The ranking reflected the recognition that this project was either currently delivering the highest quality results or was of the highest strategic priority for the future.

Category: **Medium-Higher Priority**

### ***D0***

The ranking reflected PPAN's view that, while this facility is nearing the end of its lifetime, there remained an opportunity for revolutionary, ground-breaking results.

Category: **Medium-Lower Priority**

### ***EISCAT***

The ranking for the facilities reflects PPAN's concerns about the impact of UK involvement and impact of the science. It notes that individual cases for access can still be considered by the astronomy grants panel.

Category: **Lower Priority**

### ***eEDM***

The ranking reflected that this project had the potential to produce fundamental, breakthrough results. The relevant UK community was small, and in a very competitive field.

Category: **Medium-Lower Priority**

### ***ELT R&D***

The ranking reflected the recognition that this project was either currently delivering the highest quality results or was of the highest strategic priority for the future.

Category: **Medium-Higher Priority**

### ***ExoMars***

The ranking reflected the recognition that this project was either currently delivering the highest quality results or was of the highest strategic priority for the future.

Category: **Medium-Higher Priority**

### ***FP420***

PPAN understood that the UK profile in this project is high but felt that the probability of high impact science was relatively small. PPAN did not exclude the possibility of further proposals being submitted in this area but it was anticipated that these would form part of any ATLAS or CMS upgrade.

Category: **Lower Priority**

### ***GAIA***

The ranking reflected the recognition that this project was either currently delivering the highest quality results or was of the highest strategic priority for the future.

Category: **Medium-Higher Priority**

### ***Gemini***

The UK remains a partner in Gemini until at least 2012, but the intention is to sell 50% of our time on the two telescopes from 2009. Options remain to contribute to the Aspen instrumentation programme.

Category: **Lower Priority**

### ***GEO600***

The ranking reflected the recognition that this project has the potential for truly revolutionary, breakthrough science or already has an established track record for doing so.

Category: **High Priority**

### ***GridPP***

The ranking reflected that GridPP was an essential component of support for the LHC. A small reduction in funding of 5% is suggested to reflect a likely reduction in the user community due to a reduction in LHCb and ALICE support. GridPP should ensure that the

reduction should not increase the risk to the Tier-1 centre which is viewed as of fundamental importance to the project and of the highest priority.

Category: **Medium-Higher Priority**

### ***Herschel***

The ranking reflected the recognition that this project was either currently delivering the highest quality results or was of the highest strategic priority for the future.

Category: **Medium-Higher Priority**

### ***HESS***

The ranking reflects PPAN's concerns over the size of the UK involvement and the UK science impact. PPAN notes that support may still be considered by the astronomy grants panel.

Category: **Lower Priority**

### ***Hinode***

The ranking for Hinode reflects PPAN's concerns about the level of UK impact.

The UK has invested substantially in instrumentation for Hinode. It is early in its lifetime and the programmatic review input occurred before there was any published science output, making it difficult to assess its true impact. Current post-launch support extends for a further year or more, and involves commitments to international partners that will be honoured. The case for further support will be reviewed at that time.

Category: **Lower Priority**

### ***ING***

International agreements do not allow savings to be made by early withdrawal from the ING. The continued importance of the WHT for optical astronomy in the Northern hemisphere was recognised, as was the potential strategic value of the WHT for E-ELT R&D.

Category: **Medium-Lower Priority**

### ***Precision Tests of Gravitation at Short Ranges (Inverse Square Law)***

The ranking reflected the recognition that this project was either currently delivering the highest quality results or was of the highest strategic priority for the future.

Category: **Medium-Higher Priority**

### ***ISOLDE***

The ranking reflected the view that the science undertaken was strong; there was some uncertainty over the future of the project as an upgrade would be required in order to stay competitive.

Category: **Medium-Lower Priority**

### ***JCMT and SCUBA-2***

The ranking reflected the recognition that this project has the potential for truly revolutionary, breakthrough science or already has an established track record for doing so.

Category: **High Priority**

### ***Jefferson Lab***

The ranking reflected the recognition that this project has the potential for truly revolutionary, breakthrough science or already has an established track record for doing so.

Category: **High Priority**

### ***JWST MIRI***

The ranking reflected the recognition that this project was either currently delivering the highest quality results or was of the highest strategic priority for the future.

Category: **Medium-Higher Priority**

### ***Jyvaskyla***

PPAN noted there was no current financial commitment to this facility and the potential funding request was small. PPAN therefore decided to advise the nuclear physics grant panel that any grant request involving the use of Jyvaskyla should be judged on the normal criteria, not basing its decision solely on the ranking in the programmatic review.

Category: **Medium-Lower Priority**

### ***KMOS***

The ranking reflected the recognition that this project has the potential for truly revolutionary, breakthrough science or already has an established track record for doing so.

Category: **High Priority**

### ***LCFI***

The ranking reflects PPAN's assessment of the priority of investing in R&D towards the ILC project. They note that they would have made this recommendation even if the STFC council decision on ILC had not already been taken.

Category: **Lower Priority**

### ***LHC Upgrades - ATLAS***

The ranking reflected the recognition that this project was either currently delivering the highest quality results or was of the highest strategic priority for the future.

Category: **Medium-Higher Priority**

### ***LHCb***

The UK leadership in LHCb is strong, and this facility is just about to start producing important physics at CERN, after substantial UK investment. However this physics is not expected to have as high an impact as that from the LHC general purpose detectors. As the investment relative to science impact was relatively high, some reduction in funding should be considered.

Category: **Medium-Lower Priority**

### ***LISA Pathfinder***

The ranking reflected the recognition that this project was either currently delivering the highest quality results or was of the highest strategic priority for the future.

Category: **Medium-Higher Priority**

### ***Liverpool Telescope***

The ranking reflected the recognition that this project was delivering high quality results. In addition, PPAN wished to reflect its support for the strength of the LT's outreach and knowledge transfer programmes.

Category: **Medium-Higher Priority**

### ***Merlin/e-Merlin and JIVE***

The ranking reflects PPAN's concerns about the size of the user base and breadth of science impact of these facilities.

The current planning assumption is that support be withdrawn from 1 April 2009.

However, e-Merlin has been delayed substantially from the original start-date of 2006 that was assumed when PPARC made a commitment to support its operations, and early 2009 is now about the time when e-Merlin will be starting surveys. The cost of construction of e-Merlin is being borne by NWDA. We therefore plan to discuss the situation with NWDA and the University of Manchester, mindful of the potential strategic link with SKA.

Category: **Lower Priority**

### ***MINOS***

The ranking reflects PPAN's assessment that the project is coming to the end of its lifetime and the highest impact results have already been published.

Category: **Lower Priority**

### ***nEDM***

The ranking reflected the recognition that this project has the potential for truly revolutionary, breakthrough science or already has an established track record for doing so.

Category: **High Priority**

### ***Planck***

The ranking reflected the recognition that this project was either currently delivering the highest quality results or was of the highest strategic priority for the future.

Category: **Medium-Higher Priority**

### ***RISING/GSI***

The ranking reflected the recognition that this project has the potential for truly revolutionary, breakthrough science or already has an established track record for doing so.

Category: **High Priority**

### ***Roadmap to Xeus***

The ranking reflected the recognition that this project was either currently delivering the highest quality results or was of the highest strategic priority for the future.

Category: **Medium-Higher Priority**

### ***SKA R&D***

The ranking reflected the recognition that this project was either currently delivering the highest quality results or was of the highest strategic priority for the future.

Category: **Medium-Higher Priority**

### ***SOHO***

The ranking reflected PPAN's view that this was a high impact mission. It is expected that support will continue at an appropriate level until the end of the project's lifetime.

Although the mission was nearing the end of its lifetime, there was still an opportunity for new results.

Category: **Medium-Lower Priority**

### ***Solar Orbiter***

The ranking reflected the recognition that this project was either currently delivering the highest quality results or was of the highest strategic priority for the future.

Category: **Medium-Higher Priority**

### ***SPIRAL***

The ranking reflected the recognition that this project has the potential for truly revolutionary, breakthrough science or already has an established track record for doing so.

Category: **High Priority**

### ***Stereo***

The ranking reflected PPAN's view that this was a potentially high impact mission. The UK has invested substantially in instrumentation for Stereo. Since the mission is in an early phase of operation and results are just emerging, the case for further support will be reviewed in due course.

Category: **Medium-Lower Priority**

### ***SuperNEMO***

The ranking reflected the recognition that this project was either currently delivering the highest quality results or was of the highest strategic priority for the future.

Category: **Medium-Higher Priority**

### ***SWIFT***

The ranking reflected the recognition that this project has the potential for truly revolutionary, breakthrough science or already has an established track record for doing so.

Category: **High Priority**

### ***T2K***

The ranking reflected the recognition that this project was either currently delivering the highest quality results or was of the highest strategic priority for the future.

Category: **Medium-Higher Priority**

### ***UKIRT***

We plan to move UKIRT to 100% survey mode as soon as practical after 1 April 2008. Efforts are in hand to find international partners to share the cost of running the telescope in return for access to UKIDSS. Should these fail to materialise, immediate closure would have to be seriously considered.

PPAN recognised that the UKIDSS survey was only partially complete but felt that the overlap with the VISTA survey meant that UKIDSS' priority was lowered. PPAN also considered that the non-survey science being done at UKIRT could be covered using other telescopes to which UK astronomers had access. Thus, overall, UKIRT fell into the lower priority category.

Category: **Lower Priority**

### ***UKSSDC***

The ranking reflected PPAN's view that the facility did not undertake science directly and thus direct science impact was low. The value of the facility for solar and solar terrestrial physics data access was recognised.

Category: **Medium-Lower Priority**

### ***Venus Express***

The ranking reflected the recognition that this project has the potential for truly revolutionary, breakthrough science or already has an established track record for doing so.

Category: **High Priority**

### ***VERITAS***

The ranking reflects PPAN's concerns over the size of the UK involvement and the UK science impact. PPAN notes that support may still be considered by the astronomy grants panel.

Category: **Lower Priority**

***XMM Newton***

The ranking reflected PPAN's view that, while this facility had high science impact and was expected to continue to produce interesting results, the highest impact results have already been published.

Category: **Medium-Lower Priority**

***Zeplin III***

The ranking reflected the recognition that this project was either currently delivering the highest quality results or was of the highest strategic priority for the future.

Category: **Medium-Higher Priority**