

Report From Science Committee

Jenny Thomas, IoP Town Meeting

● One year since last Town Meeting

● SC scientific business

- Reapproval of LHC-GPDs
- High Performance Computing
- Funding of new projects
- Statements of Interest
- Accelerator Centres

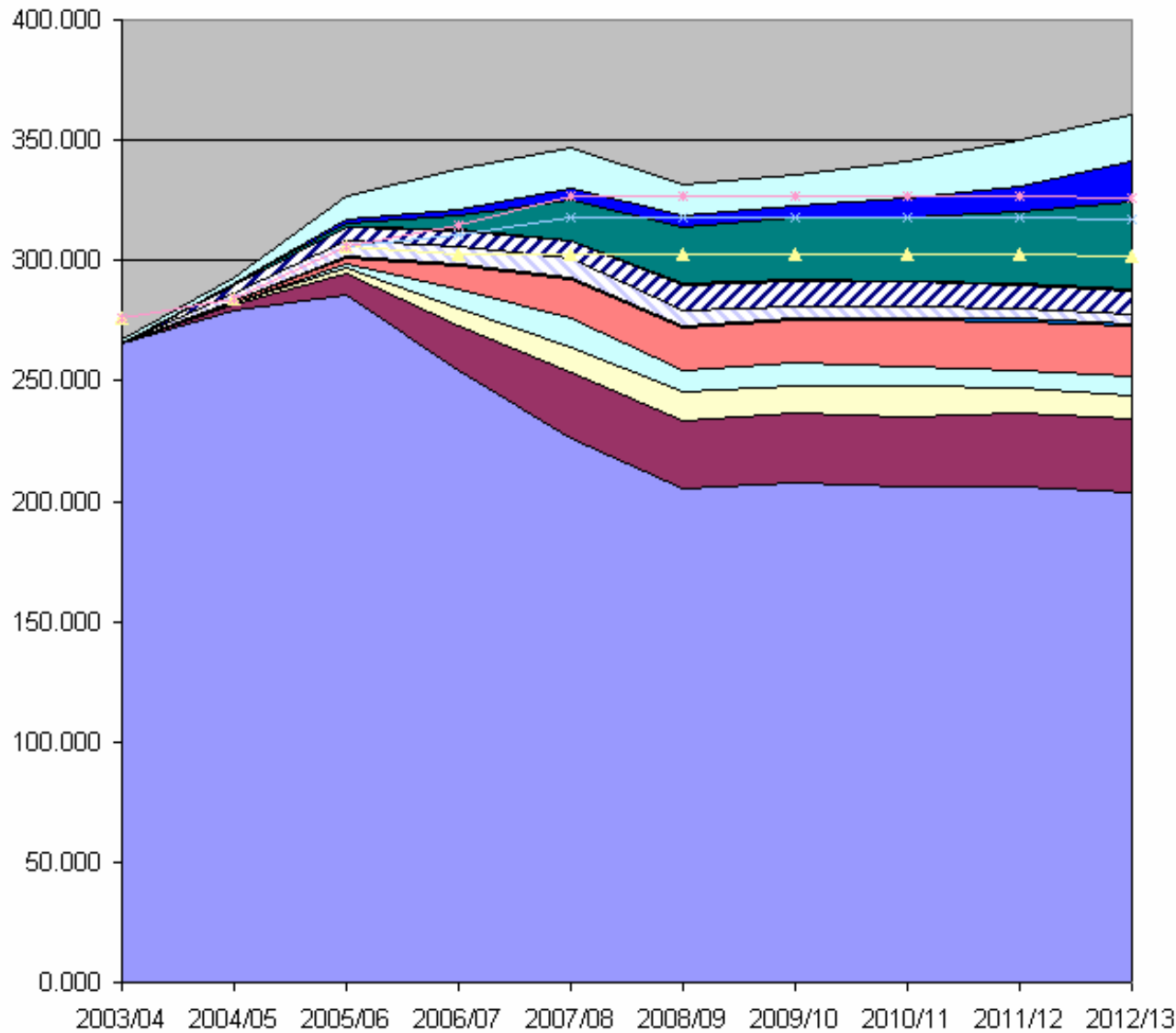
● SC administrative business

- New Members/Retiring members
- Meetings with Peer-Review and AP chairs
- Visits to PP institutes
- SLA Review

● Review of Peer Review Structure

SC Strategy

- SC has defined a strategy over the last few years
 - New projects are essential to the life blood of our field
 - Longer term and shorter term projects must be planned for
 - High impact science will be funded where:
 - UK can play a major and intellectually leading role
 - Science is internationally excellent, timely and fundamental
 - Sun-setting is a natural part of a vibrant programme
 - Blue skies R&D is an important investment in the future



Who is SC?

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- Martin Ward, Leicester (Chair)
- Jenny Thomas, UCL (Deputy Chair)
- Jordan Nash, IC
- Richard Hills, Cambridge
- Jeff Forshaw, Manchester
- John Peacock, Edinburgh
- Norman McCubbin, RAL
- Mike Lockwood, RAL
- Brian Foster, Oxford
- Keith Mason, MSSSL

SC Scientific Business

A decorative graphic element consisting of a blue gradient shape that starts as a thin line on the left and curves downwards and to the right, ending as a solid blue area at the bottom right corner of the slide.

Approval of LHC-GPDs

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- PPARC council reapproved the LHC-GPDs at £115.61M
- This was not completely straightforward:
 - New changes to the leadership structure were required by Council
 - SLA Review was a necessary but not sufficient component of this
- Great progress continues to be made: the community eagerly awaits the LHC physics!
 - Oversight committees set up for CMS and ATLAS
 - Independent oversight: from PPARC and from GPDs

Review of HPC (B.Weber)

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Funding of New Projects

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- n-EDM experiment was considered
 - approved at the level of £1.5M (additional funds)
 - SC wants projects that are worth approving to be awarded the resources necessary to deliver the science
 - 'The PPRP had agreed that this was a timely, well-thought-out proposal that built upon the UK's lead in nEDM measurements. This view had been echoed by the referees, some of whom were international and from projects in direct competition with the UK group.'

Funding of New Projects

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- Very Small Array Proposal (~£2M:2004/08) was considered
 - Scientific priority not high enough to displace other projects in the programme
- Rayleigh Guide Star Proposal (~£600k:2003/2005)
 - Considered not easily expandable to the new 8m Telescopes
 - Again, not high enough priority to displace other projects in the programme
- Innovative Technology panel recommendations were endorsed by SC at level of £250k

Statements of Interest

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- **Antares SoI was considered, special case**
 - SC felt no convincing strategic case was there for continued UK involvement
 - Cosmic neutrinos already studied by Amanda
 - Dark matter studies not strong enough justification
- **Pathway to the Square Kilometre Array**
 - Participation in the development stage of the SKA by UK consortium : NBT in radio astronomy
 - Proposers encouraged to come back with a proposal
- **Super-NEMO Double Beta Decay**
 - Scientific goals were deemed timely and fundamental
 - Proposers encouraged to increase size of UK collaboration, come back with a proposal

E-Science, round II

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- PPRP+E-science experts peer reviewed £70M worth of E-science proposals
- Only £31.6M available over 2004/2008
- Good package put together by Grid Steering Committee after PPRP review and endorsed by SC
 - Contribution to CERN depends on strong case being made (~£1M left over)
 - No mention of PPARC in CERN annual report under e-science progress!!!

Accelerator Centres

- A call for proposals for Accelerator R&D and Accelerator Centres of excellence were put out in June 2003.
- Two serious contenders for the centres:
 - Cockroft Centre (NW consortium) (12 academics)
 - Oxford/RHUL (6 academics)
- PPRP recommended funding only Cockroft in view of limited projected funding (~£1M/year)
- Oxford/RHUL + RAL rebid
- SC decided to allocate more money (extra £400k/year after present round)

Accelerator R&D

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- Two Centres (£9m over 8 years)
 - Up to 18 new academic appointments
- LC-ABD: £7.2m plus £1.8 from rolling grants
- UKNF/ MICE: £2.1m plus £1.1 from rolling grants

Accelerator Centres

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- SC was concerned that setting up two institutes might make it difficult for either one to flourish in view of difficulty of recruiting 18 academics
- However, we felt that the final outcome might well be the best strategic solution for the UK as a whole with different people being attracted to the different aspects of either centre
- Some aspect of competition is considered good: however, it is expected that cooperation will be the most important factor in the overall growth in accelerator physics within the UK.
- The rest of the world is suffering cuts in science funding which are very severe: the UK stands to attract top rank scientists because of Government's progressive stance on Science and PPARCs ability to get the money from OST.

Strategy Review Meeting:

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Oct 28/29th

- Future big ticket items were discussed
 - Linear Collider
 - Aurora
 - ELT/SLA
- Scenarios for funding all future desires are difficult but not impossible
- Depends a lot on SR 2006
- Also on status of projects and international politics

SC Administrative Business

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Membership of SC

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● New Members

- Jordan Nash (IC/CERN) and Jeff Forshaw (Manchester) replaced John Dainton (Liverpool) and James Stirling (Durham).
- Richard Hills (Cambridge) replaced Steve Rawlings.

● Retiring Members

- Norman McCubbin (RAL), Mike Lockwood (RAL) and John Peacock (Edinburgh) will retire in June
- Nominations are requested for their replacements

● Office personnel

- Carol Armstrong has retired and Guy Rickett will replace her as SC secretary

Membership of other PPARC

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Committees

- There are vacancies on all the peer-review panels coming up
 - Nominations are encouraged from the community
 - There is now a set of guidelines for committee appointments on the PPARC web site
 - The nominations are taken very seriously
- Jon Butterworth is new Deputy Chair of PPRP (will become Chair)
- Neville has done a marvellous job, congratulations on his PPARC fellowship.
 - Mike Cruise now waxes lyrical about the PP way of doing things at the PPRP.
- Peter Dornan will become chair of the PPAP in June

Meetings with Peer Review Chairs

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- SC chair and deputy have met twice with Peer-Review chairs (AGP, PPGP, PPRP)
 - Very important and useful results from these meetings
 - Some suggestions already ratified at SC introspective (PPRP changes)
 - Symmetry will exist between A and PP members
 - Open presentations for A as well as PP
 - New plans to funnel technology fund into PPRP
 - Similarly, technology funds will be made available for A through the PPRP (Not yet ratified by SC officially)
 - Symmetry for A and PP : one big pot. Danger *and* Opportunity!!
 - Project definition will no longer be financial: if there is a physics result, it's a project.

Meetings with AP Chairs

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- One meeting so far in the last year
- Still some fundamental disagreements with how things should function from PP and AP side
 - Should AP chairs sit on SC?
 - No! They must promote their science with shameless bigotry
 - There IS a competition between all parts of the programme for the resources. Dialogue over details is important however.
 - Should AP s have a budgetary envelope?
 - No! First identify the new important science
 - Look at the particular science, its projected total cost worldwide, the UK potential personnel, their potential contribution. How much is needed to provide a leadership role (or experiment) for UK?
 - Then go and lobby for it at SC strategy meeting and within the community.

Visits and Roadshows

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- SC Roadshows were canned: not enough interest
- There will be two town meetings per year for information
- JT and JS/RW visited almost all grant holders who expressed interest to talk about PPARC/SC plans
- This seems to have been very successful in improving PPARC/University communication and appreciated by the grant holders.
- Will propose to repeat this in due course if there is interest
- Please let me know if you are interested in a visit.

SC Introspective Meeting

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- Introspective meeting in August to determine improvements to SC/peer review working practices
 - Among suggested changes were:
 - PPARC visits to RG holders to improve communication
 - SC members to be present at AP and PPRP meetings
 - SoIs to be submitted at any time
 - Feedback of referees comments to grant applicants before meeting (already done in PP)
 - Improved reporting of how posts are allocated by grants panels: does it represent the SC priorities?

Strategic Reserve Fund

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- Chief Executive will have a strategic reserve of £0.5M/year
 - Helps SC to plan
 - Will be reassessed in due course
 - New group at Warwick established from this fund (retroactively)

SLA Review

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- Difficult job: C.Sacradja(chair),D.Wark, P.Allport, K.Peach, G.Lafferty, R.Wade, J.Seed, K.Mason
- Expansion of remit to include a review of the Rolling Grants
- New system gives more autonomy and financial responsibility to project leaders, although choice to use 'old' system is still in place for travel and M&O
- Funds for all construction projects will be ring fenced.
- Puts running experiments resources under the control of PP grants panel, who also control rolling grant resources
- Expected this will lead to better overall awareness of experiments needs and resources will be better delivered where they are needed.
- Similar review in the works for Astronomy in light of some of the successes of this review

Review of the Peer-Review

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Structure

- Efstathiou panel report lays out recommendations for improvements (many had already been implemented and have been mentioned)
 - Leave present peer-review structure as is
 - 'Has delivered significant improvements in PPARCs planning and decision making'
 - Things can be improved of course.....
 - Bring A and PP into a symmetrical arrangement where at all possible, mostly through the PPRP conduit.
 - Open presentations at PPRP for Astronomy
 - Symmetry of A and PP in PPRP core members
 - Improve communication and reporting between PR and A panels and SC
 - Improve communication between ET&C committee and Science Committee

Summary

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- There have been substantial improvements to the peer review structure over last year
- SC has not been able to approve many projects in view of financial constraints
- This will improve as time goes on
- Financial planning has been a major focus
- Will Ian win again at SR2006?