

The importance to the UK economy of a vibrant physics research community is clearly brought out in the Wakeham report published on 1st October. It draws attention to the need to attract more students, and particularly female students, to study physics at A-level and at undergraduate level. It also recognises the role of the excitement around particle physics research in attracting students to undergraduate physics courses, as well as the extremely strong international standing of UK physics research in our area.

The report has much to say about the decline in “applied physics” as a discipline. It expresses concern that undergraduate physics teaching is concentrated in the pre-1992 research based universities and that most of the 28 physics departments that have been lost since 1995 have been both in the post-1992 universities and typically having a more applied research or teaching-led emphasis. This has also led to much of the applied physics research that now happens in the university sector being found in departments other than physics, with the associated concern that this narrows the undergraduate experience on a physics degree. The report further suggests that the increase for physics funding at 34% over the last decade, against a science budget increase of 82% over the same period, may reflect that physics departments have not better aligned their priorities with the themes emphasised by the current UK government. Nevertheless, it also documents that a high level of satisfaction expressed by employers in physics graduates, and salaries 3.5 years after graduating are reported to be in the top third of all degree subjects. It also recognises the major contributions of curiosity-led research, such as particle physics, to paradigm shifting technology development.

The panel has also looked at the PPARC and CCLRC merger and recognises the need to keep funding of the former PPARC facilities and grant funding together within STFC. However, it also recommends that funding for these, at the CSR level, should be specified separately to avoid direct tensioning within STFC with their national facilities and innovation campuses. There is also a recommendation to broaden STFC’s Council to include more stakeholders in the science activity at the highest level.

The problems associated with international subscriptions such as CERN are recognised. Although the panel recommendations do not give a clear solution to insulating the domestic research budgets in the areas affected from the impact of currency fluctuations, it does include the suggestions of either meeting these centrally from Treasury (analogous to the solution in many other countries) or making the payments in Euros or Swiss Francs out of receipts due to the UK in these currencies.

The panel’s comments on the operational problems STFC has experienced are constructive, although the issue of the significant underfunding of the PPARC and CCLRC merger to create STFC is not discussed. However, for many of us, the impact of the large cuts necessitated by this, are by far the most pressing issue. In addition, we are all struggling with the consequences of the full economic costing, reducing the volume of research funded in many research councils.

Despite all these current concerns, the main thrust of the report is to recognise the very welcome previous investments and encourage further increases in government support for physics to both retain and promote the UK excellence in this discipline. As well as its own inherent excitement, the report emphasises how physics underpins many other fields and has a vital role to play in supporting the UK economy.