Oxford Physics receives a large number of applications for places on both the Physics and Physics and Philosophy courses. In 2012 there were a total of 1160 applicants contesting around 190 places, more than 6 applicants per place. In the short-listing, we used the results of our Physics Aptitude Test to guide us in reducing the number of applicants to around 2.5 per place.

These tests have been run for several years, and are known to be good predictors of future performance at Oxford; in particular they are known to be better predictors than GCSE results. The tests are set to a defined syllabus and the contents are checked by school teachers to ensure that they are set at an appropriate level. The maths and physics tests are combined into a single two-hour paper, with candidates asked to write their answers in the spaces provided on the question paper. Further details including sample papers can be found on the Oxford Physics Admissions website www2.physics.ox.ac.uk/admissions/.

We are extremely grateful to all the schools and test centres for hosting candidates and bearing with us through inevitable hitches. The great majority of tests went smoothly, and in the small number of cases where there were difficulties we have made due allowance in interpreting marks. We took into account hurricane Sandy in the USA, medical certificates and letters drawing attention to adversities in applicants’ personal lives. We are grateful for the advice we have received from schools on making the administration of these tests simpler, and expect to continue to make minor changes reflecting this advice in subsequent years.

Our primary short-listing criterion is the total mark achieved on the combined test, which ranged from 11 to 83, with a mean mark of 48 and a standard deviation of 11. More details are shown in the graph, where y-axis is the fraction of candidates achieving the x-axis score or less. All applicants scoring 51 and above were short-listed. A small number of applicants below this cut-off whose application forms showed other evidence of excellence or had been ill during the test were add, to arrive at a final short-list of around 500 candidates who were invited to Oxford for interview (candidates from outside Europe were mainly interviewed by Skype or by telephone).

A key element of the Oxford Admissions process is that the chance of admission should not depend on the choice of College applied to. Our short-listing is, therefore, followed by a reallocation process, in which candidates are transferred from Colleges with large numbers of candidates to Colleges with a smaller number of candidates, so as to ensure that the number of candidates per place is approximately constant across the collegiate University. This year 83 candidates were reallocated. Reallocation has been practised by the University for many years, assuring that all strong candidates have the same chance of obtaining places at Oxford, although possibly not at their first choice Colleges.