Report on the Physics Admissions Exercise 2015

Oxford Physics receives a large number of applications for places on both the Physics and Physics and Philosophy courses. In 2015 there were a total of 1226 applicants contesting around 200 places, over 6 applicants per place. There were a further 6 applicants for entry in 2017. Of the total cohort, 895 were male and 337 female. There were 915 applicants classified as “home” students, 112 EU, and 205 overseas.

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. Minor format changes included the elimination of multiple choice questions, and of long questions in favour of medium-length questions worth less than 10 marks each. 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. We took into account 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 4 to 99, with a mean mark of 56.9 and a standard deviation of 17.3. More details are shown in the graph, where the $y$-axis is the fraction of candidates achieving the $x$-axis score or less. All applicants scoring 65 and above were short-listed. Roughly 70 applicants below this cut-off whose application forms showed other evidence of excellence or had been ill during the test were added, to arrive at a final short-list of 491 candidates who were invited to Oxford for interview.

A key goal of the Oxford admissions process is that the chance of admission should not depend on the applicant's choice of College. Indeed, 213 applicants elected to make no choice and were assigned a College. Short-listing was then followed by a reallocation process in which candidates were 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 71 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.

In the vast majority of cases, each short-listed candidate was interviewed by two Colleges. Candidates from outside Europe who could not come to Oxford were interviewed by Skype or by telephone. Candidates were then assessed on the basis of their PAT scores, interview results, and the information on the UCAS form, including contextual information, and compared centrally against all candidates applying to Oxford Physics. Colleges were encouraged to identify promising candidates for consideration by other Colleges which may or may not have seen that candidate for interview. In the end, offers were made to 208 candidates.