## Report on the Physics Admissions Exercise 2017

Oxford Physics receives a large number of applications for places on both the Physics and Physics and Philosophy courses. In 2017 there were a total of 1466 applicants contesting around 200 places, more than 7.3 applicants per place. There were a further 15 applicants for entry in 2019. Of the total cohort, 1077 were male and 404 female. Of these applicants $69.4 \%$ were classified as "home" students, $12 \%$ EU, and $18.6 \%$ 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 2.7 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. This year we have re-introduced a section with multiple choice questions. 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 in which maths and physics questions are mixed together, 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 that may have affected candidates performance or ability to participate in the tests. 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 100, with a mean mark of 52.1 and a standard deviation of 14.3. 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 59 and above were short-listed. Roughly 87 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 531 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. This year 216 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 73 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 211 candidates.

