Report on the Physics Admissions Exercise 2018

Oxford Physics receives a large number of applications for places on both the Physics and Physics and Philosophy courses. In 2018 there were a total of 1567 applicants for entry into physics or physics and philosophy to start in 2019, an increase of 102 (7%). These applicants were contesting around 200 places, or more than 7.8 applicants per place. There were a further 16 applicants for entry into courses starting in 2020 bringing the total number of applicants to 1583. Of all the applicants, 1021 (64.5%) were classified as “UK” applicants (down from 69.4% in 2017), 207 (13.1%) were classified as EU but not UK (up from 12% in 2017), and 355 (22.4%) (up from 18.6% in 2017) were classified as overseas (non EU).

In the short-listing, we used the results of the Physics Aptitude Test to guide us in reducing the number of applicants to around 2.6 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 test is a two-hour paper, covering elements of mathematics and physics. It is set to a defined syllabus and checked by school teachers to ensure that the level is appropriate. 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 schools and test centres for hosting candidates. We took into account medical certificates and letters drawing attention to adversities in applicants’ personal lives that may have affected candidate 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 such advice in subsequent years.

Our primary short-listing criterion is the total mark achieved on the PAT, which ranged from 4% to 98%, with a mean mark of 52.1% (52.1 % in 2017) and a standard deviation of 16% (14.3% in 2017). 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 62 and above (441) were short-listed by virtue of their test scores. A further 79 applicants below this cut-off whose application forms showed other evidence of excellence or mitigating circumstances were also short-listed, resulting in 520 candidates who were invited to Oxford for interview.

Overseas (Non-EU) applicants were offered the option of remote interviews via Skype.

A key goal of the Oxford admissions process is that the probability of admission should be independent of the applicant's choice of college. Short-listing was therefore followed by a reallocation process in which candidates were transferred from colleges with a large ratio of candidates per place to colleges with a smaller ratio. This ensured that the number of short-listed
candidates per place was approximately constant across the collegiate University. This year 83 candidates were reallocated. Reallocation has been practised by the University for many years, ensuring 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, two colleges interviewed each short-listed candidate. Candidates from outside Europe who could not come to Oxford were interviewed by Skype. Candidates were then assessed based on their PAT scores, interview results, and the information on their UCAS forms, including contextual information, and compared cross-college against all candidates applying to Oxford Physics. In 13 cases candidates were offered a place from a college that had not interviewed them.

Ultimately, 216 offers were made for entry in 2019 of which 14 were open offers and 18 were for Physics and Philosophy.