

ASPIRE scientific report 2019

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Between 1st June - 9th August 2019, the Anton Pannekoek Institute, University of Amsterdam hosted the inaugural edition of ASPIRE: Astrophysics Summer Program for International Research Experience. We recognise that our strengths and successes in astronomy come from the diversity of our researchers, whose unique personalities, backgrounds, cultures and talents enhance our progress in science. This 10 week summer student research program was aimed at BSc/MSc students from countries where research opportunities are scarce, and from groups whose talents are typically untapped, including people of colour, women, and those from less privileged socio-economic backgrounds. Our goal was to give these underserved groups access to and the opportunity to conduct astronomical research at a world-leading institute, that would give them the skills and experience they need to take the next step in their careers as scientists. At the same time, our postdocs who designed and lead these individual research projects with the students, gained skills in mentoring, supervision, and leadership. We received over 400 applications for eight places. We selected six women and two men to join us in Amsterdam from eight different countries, including Argentina, Brazil, Bolivia, El Salvador, Kenya, Pakistan, Venezuela, and Zambia.

Alongside their individual research projects, the students participated in a number of events as well. These included i) a visit to LOFAR to learn about Dutch radio astronomy; ii) a visit to ESTEC to learn about ESA missions and space science; iii) professional development workshops on identity and self-care at the API in collaboration with Prof Markoff's Advancing Theoretical Astrophysics summer school; iv) a workshop on introduction to python programming at API in their first week to get them ready for their projects; and v) a special weekly lecture series from the API faculty on Research Highlights in our fields of astronomical research. The program was celebrated at its close with the ASPIRE symposium, where each student gave a 20 minute talk on their ASPIRE research project and answered questions from the API and the Dean of FNWI on their work. Several of these projects are now being written up for publication in leading astronomical journals. Since the program finished, nearly half of the students applied for PhD positions at the API, and three of the students have already successfully gained entry to PhD programs, while the others are beginning Masters degrees or are finishing up with their undergraduate degrees. We aim to continue running the program, and will be monitoring the ASPIRE alumni's career paths as they take their experience from the program and continue in science. The students further wrote a blog of their time and activities during the summer program that can be read here: <https://aspire.science.uva.nl/blog.html>.