Black Lives Matter

A statement from the School of Mathematics EDI Committee endorsed by the School

The School of Mathematics stands in solidarity with our Black students and colleagues. We acknowledge that systemic racism is present throughout our society, University, and School, and in scientific communities, including mathematics. We recognise the responsibility of those of us that are not Black - in particular those of us that are white - to change and to educate ourselves.

We endorse the linked statements and messages by the following:

- <u>University of Bristol BAME Staff Network</u>
- Bristol Students' Union
- University of Bristol response to the Black Lives Matter movement
- <u>Brian Nord, Chanda Prescod-Weinstein</u>, and the other organisers of #strike4blacklives (The authors refer to physics, but their words apply verbatim to mathematics):

"Anti-Blackness is pervasive throughout academia [...]. Ending white supremacy is a matter of urgency, yet far too often, instead of using power to question institutional practices and advocate for Black students, faculty and staff, many senior academics and administrators retreat to the Ivory Tower, disengaging from the pursuit of justice. Again, the fight against white supremacy -- in all of its manifestations -- is an urgent one, and we are clear that justice will not be achieved until Black people not only have the right to survive but also thrive."

We hear the call for active anti-racism in our university, our School, and the mathematics community. Alongside efforts to increase diversity and inclusion, this means understanding and working to end our complicity in institutionalised racism, from the de facto discrimination that has led to a <u>14 per cent pay gap for Black staff in UK universities</u> to the <u>documented culture of racial harassment</u>. The tolerance of persistent inequality sits on the same spectrum as the implicit tolerance of police violence, including in the UK, which most recently culminated in the death of George Floyd in the USA. In order to address it at the root, we must ensure parity of esteem for Black lives and voices, starting with our own institutions.

As mathematicians, we must interrogate how our research practices and partnerships are enmeshed in systemic racism. This includes reviewing our research funding, identifying how our research might be applied in ways that fuel oppression and violence. We must determine collectively what anti-oppressive, and specifically anti-racist, mathematical research looks like. For example, we can start by reading <u>Professor Federico Ardila-Mantilla's reflections on the applications of research</u>, doing the <u>accompanying exercise</u>, and listening to the talk <u>Can Computers be Racist?</u>, by Professor Latanya Sweeney. As teachers of mathematics, we must fight exclusion in our teaching. We must teach in a way that punctures alienating myths - pervasive in the mathematics community and implicit in teaching and assessment, but having little to do with mathematics - about "brilliance" and "talent". To start, we encourage colleagues to read <u>this article by number theorist Dr Piper Harron</u> and <u>this article by maths education researcher Dr Karin Brodie</u>.

As members of the university community, we must name patterns of institutional racism. This means acknowledging our function as gatekeepers at the level of hiring staff and recruiting students, and using our roles to demand concrete changes. We encourage colleagues to engage in an open-minded way with <u>this article by Dr Harron</u>.

We acknowledge that this is a difficult, permanent process. We acknowledge that, in aggregate, we currently lack much necessary expertise. **Our immediate-term commitments are:**

- We will seek advice from the UoB BAME Staff Network, whose work includes contributing to policies "to ensure that BAME staff have a consistent and positive experience at the University".
- We will consult with the Bristol SU BME Network about how their work on **diversifying the curriculum** can be applied in the context of our School. We will also investigate incorporating mathematical ethics and social justice in our undergraduate teaching.
- Creating a regular reading group for staff (and potentially involving students) to learn more about racism in Mathematics, challenges and possible actions.
- We will investigate our history of hiring in detail via the School EDI committee, to identify numbers of Black applicants, numbers invited for interview, etc. We will establish concrete procedures to encourage applications from Black mathematicians and mitigate barriers to entry.
- We will take quantifiable measures to raise the representation of Black mathematicians in our seminars, implementing the same procedures we currently use to increase the number of women speakers.
- We will identify people in or adjacent to the mathematics community who have done scholarly work on systemic racism in mathematics and its applications, and invite them as colloquium speakers.

For those of us personally insulated from these issues by the privilege of our race, it is a vital act of solidarity with our Black colleagues, students, and friends to educate ourselves. We encourage engagement with the above links. Some other resources – specific to maths/science/higher education – include:

Resources for staff

- Shut Down STEM: https://www.shutdownstem.com/action
- Particles for Justice: <u>https://www.particlesforjustice.org/</u>
- Statement from ArXiv staff on #strike4blacklives:<u>https://blogs.cornell.edu/arxiv/2020/06/08/strike4blacklives/</u>
- *CAT(0) geometry, robots, and society.* Federico Ardila-Mantilla. <u>https://arxiv.org/pdf/1912.10007.pdf</u>
- Data for Black Lives: <u>http://d4bl.org/</u>
- What does it mean to do mathematics ethically? Federico Ardila. (<u>http://math.sfsu.edu/federico/ethicsinmath.html</u>)
- Case study on complicity of mathematics in institutional racism and structural violence: a criticism of work by mathematicians, in partnership with police and the private sector, on "predictive policing", see e.g. https://ideas.ted.com/justice-in-the-age-of-big-data/
- Invisible Labor. Eric Anthony Grollman. <u>https://www.insidehighered.com/advice/2015/12/15/column-about-exploitation-minority-</u> <u>scholars-academe</u>
- How Gender and Race Stereotypes Impact the Advancement of Scholars in STEM: Professors' Biased Evaluations of Physics and Biology Post-Doctoral Candidates. Asia Eaton et al. (http://faculty.fiu.edu/~aeaton/wp-content/uploads/2019/06/Eaton-Saunders-Jacobson-West-2019.pdf)
- Yes, mathematics can be decolonised. Here's how to begin. Karin Brodie. (<u>https://theconversation.com/yes-mathematics-can-be-decolonised-heres-how-to-begin-65963</u>)

Resources for everyone

- Weapons of Math Destruction, Dr Cathy O'Neil's book on the misuse of mathematical models in policing, employment, finance, and other applications, and how this solidifies racial injustice (https://weaponsofmathdestructionbook.com/)
- Algorithms of Oppression, Professor Safiya Umoja Noble's book on data discrimination (<u>https://nyupress.org/9781479837243/algorithms-of-oppression/</u>)
- Mathematically Gifted and Black: <u>https://mathematicallygiftedandblack.com/</u>
- New York Times profile on Professor Edray Goins
 (https://www.nytimes.com/2019/02/18/us/edray-goins-black-mathematicians.html)