Statement of Contributions to Diversity: Statement addressing past and/or potential contributions to diversity through research, teaching, and/or service.

Mason A. Porter, 11/23/17

Through my research, teaching, and other scholarly (and "social justice") activities, I have a strong belief in both outreach and equity.

I have a very strong track record of recruiting students from underrepresented groups, and I have supervised a very large number of students, relative to my career age. Many of these students are female, considered an underrepresented group in Mathematics (e.g., our department only has 10% ladder faculty female and roughly the same percentage of Ph.D. students). More specifically, since earning my Ph.D. in 2002, I have supervised or co-supervised 26 Ph.D. students, including 13 to completion. Among these students, 10 are women, six of whom have completed their doctorates. One of those six is Michaela "Puck" Rombach, who went on to do a postdoc at UCLA and is now tenure track in the mathematics department at University of Vermont. I have also supervised 35 Masters students, 14 of whom are women, and more than 70 undergraduate students (23 women) in research projects. In summary, roughly a third of the more than 125 students I have worked with in the past 15 years are female.

Since moving to UCLA from University of Oxford, I am interacting with the leadership of the Association for Women in Mathematics, most recently their current President Ami Radunskaya when she was at IPAM for the AWM conference last spring. I make sure that my students at all levels are aware of these issues and opportunities. I am also a 2017–18 Scientific Teaching Fellow in UCLA Mobile Summer Institute (MoSI) on Scientific Teaching, which was organized by Center for Education Innovation and Learning in the Sciences (CEILS). This includes a workshop in July and subsequent discussions about teaching practice, including diversity as a major component.

In addition to mentorship directly at my own university, I have also been involved as the lead and co-lead organizer of several conferences and other programs during the past couple of years, where ensuring diversity of participants and invited speakers has played a major role. This includes being the lead organizer of the 2014 Mathematics Research Community in Network Science, where more than 40% of the participants were women. Another example is that I am co-lead organizer of the 2019 SIAM Conference on Applications of Dynamical Systems, which is the most important conference in nonlinear systems.

I have also been involved very heavily in networks outreach, including for elementary-school and high-school students. For example, I developed materials and conducted a "traveling road show" with my postdocs and students (and other postdocs and students) in the United Kingdom to teach the basics of network science to students of ages 13–16 (often at schools whose students rarely apply for admission to Oxford). We also published this work in a journal in 2013. Notably, my 2014 Erdös–Rényi prize in network science recognized not only my

scholarship but also these outreach efforts. (It was mentioned explicitly in the prize citation.) I subsequently became part of the NetSciEd team, in which I co-organize networks education sessions at the NetSci conference. We developed a booklet of core network concepts that we believe everybody should know. Thus far, this booklet has been translated into 17 languages. In April 2017, I took these various materials and others (such as AMS Mathematical Moments) and hosted, along with Puck Rombach, a mathematics booth at the Los Angeles March for Science. I also had a call with a high school to talk to students as part of the Skype a Scientist program.

In November 2016, I and others formed a data science collective called "Susan Bourbaki Anthony", where we do projects in data science for the purpose of social justice. We have written some blog entries and are collaborating with Southern Poverty Law Center. Some of our work, including network analysis of Twitter data (including using methods I have helped pioneer), has appeared in articles in venues such as *The Atlantic* and *The Huffington Post*.

In terms of my personal background, I am a second-generation immigrant: My father was born in Argentina and moved to the US when he was a teenager. His family changed their surname upon moving to the US, and my generation is the first one that was born with the surname "Porter". My parents were the first generation to go to college, and my mother was raised by a single parent, after her father (who I never met) simply left when she was about 6 years old.