STATEMENT OF CONTRIBUTION: SERVICE

ANAND DEOPURKAR

In my career, I have taken significant service roles in the university and in the broader community.

Professional service. Since I commenced my position in 2019, I have contributed to a number of departmental committees:

- In 2019, I **served on the liaison committee** (4 members) for academic hiring at MSI. Our role was to host candidates interviewing for continuing positions, collect the opinions of the MSI community about the candidates, and summarise and convey these opinions to the selection committee. I was in charge of hosting 2 candidates, who later conveyed their heartfelt gratitude for my hospitality. We held discussion meetings after every candidate presentation and reached out by various means to gather comprehensive feedback.
- In 2019, I was **on the directoral search committee** (9 members) at MSI. We made targeted efforts to invite applications from excellent candidates for the position of MSI director.
- In 2019, I served on selection committee for Future Research Talent fellowship (3 members). We selected students from top Indian universities to visit and conduct a short research project at the ANU.

I serve the broader mathematical community by **organising conferences**, **workshops**, **and seminars**.

- In 2017, with Maksym Fedorchuk, Ian Morrison, and Xiaowei Wang, I organised a week-long **international work-shop at the** *American Institute of Mathematics* in Palo Alto on *Stability and moduli spaces*. This brought together about 30 international experts working in different areas of algebraic, differential, and analytic geometry. It was highly successful and has already led to 5 new papers.
- In 2021, with Jarod Alper and Cesar Lozano Huerta, I am organising an similar sized **international workshop at** the *Banff International Research Center* in Oaxaca, Mexico.
- As a part of the *Special Year in Mathematics* at MSI in 2022, with Jarod Alper, Martin Helmer, Amnon Neeman, and Behrouz Taji, I am organising a **large conference in algebraic geometry at the ANU**, for which I am in contact with about 50 world experts in all areas of algebraic geometry.

In addition, I have organised several graduate student workshops, seminars, and learning groups.

My position as a leading expert in the mathematical community is supported by my service as a **referee of ARC grants** and of high quality research journals such as *Journal of the European Mathematical Society*, *Journal of Differential Geometry*, *Journal of Algebraic Geometry*, *Annales Scientifiques de l'ENS*, and *Journal für die reine und angewandte Mathematik*.

Outreach. I have taken a **leading role in solidifying connections of MSI with the Australian Signals Directorate (ASD)** by collaborating regularly with members of the ASD. I have been working closely with a group of researchers led by Ralph Buchholz on a project about an open problem in number theory. By conducting sessions in a workshop and having multiple informal discussions, I have taken the project in new directions using techniques from algebraic geometry. These techniques are broadly applicable in the work at the ASD.

I am enthusiastic to give **public lectures about mathematics** at various levels. During my time at the MSI, I have given a lecture in the *Fields Medal Colloquium*, where I explained to a general audience the work of Caucher Birkar, who received the Fields Medal in 2018. I also gave a public lecture on the *Women in Mathematics Day* on the work of Claire Voisin, an eminent algebraic geometer. After both lectures, I received overwhelmingly positive feedback from the audience.

I am actively engaged in **student outreach**. I have given talks to students at various levels at various places, including to high school students in the *Canberra Maths Enrichment Program (CMEP)*, *Bhaskaracharya Pratishthana* (India), undergraduate students at *Columbia University*, *Harvard University*, *Chennai Mathematical Institute* (India), *Tata Institute of Fundamental Reserch* (India), and *Vietnam Institute for Advanced Study in Mathematics* (Vietnam). On multiple occassions, the participants have told me that they have found my talks inspiring.

Behaviour. I take the initiative to enrich the communities I am engaged in. One of the ways in which I have done this is by **organising informal and inclusive seminars**. For example, I started an informal expository seminar called *Fairly Informal Seminar and Tea* at the University of Georgia and organised and delivered an informal lecture series on Hodge theory at the MSI. I am always **welcoming to students and generous with my time**, evidenced for example, by the acknowledgements to me in student theses other than my own. I am helpful to my colleagues, **happy to pick up the slack in times of need**. I was happy to supervise two honours students for half a year when they (for various reasons) found themselves without a supervisor. Likewise, I was happy to lecture multiple times in my colleague Markus Hegland's course on Scientific Computing, when he could not.

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