

## 03/06 ACT Collective Action Meeting

Chair: Morgan Rogers

Invited Speakers: Sean A; Haynes Miller

Zoom admin: Paolo

**Agenda** (all times are approximate; if each segment takes less time, this will leave more space for the discussion)

- 10:45. Morgan introduces the meeting, outlines this agenda.
- 10:50 Sean talks broadly on identifying a target, working together, linking it with ongoing efforts, and thinking about how to ground it in your specific universities and workplaces.
- 11:05 Haynes talks about ongoing efforts to support students and researchers in Gaza, including efforts that we can (individually and collectively) participate in.
- 11:20 Reading of an anonymous contribution on the topic of online spaces including people who do not have direct/in-person access to the institutions where research takes place, including from countries or regions outside of the global north.
- 11:25 ACT representatives outline the existing measures towards inclusivity at the conference, technical obstacles and planned future measures, as a baseline for discussion of what more we need to do.
- 11:30 onwards: audience-led discussion chaired by Morgan. *Questions may be directed at speakers, but it should primarily be a discussion within the community.* Possible discussion points, in addition to the above:
  - Problems specifically faced by scientists in the US under the current administration, especially problems faced by people doing category theory, and actions that are possible in support of scientists there.
  - The impact of funding cuts (international, national and institutional) and political changes that are impacting academic infrastructure. e.g. the viability of the “Choose Europe for Science” initiative.
  - Other pressures on academia due to events in the Middle East, including how we might leverage existing funding sources to build networks, communication links and sources of aid.
  - Obstacles to minority representation (geographic and demographic).

- **For all of the above, suggestions for how we can leverage our individual, community and institutional resources to address the problems.**
- 11:55 Morgan concludes the meeting with closing remarks.

Obviously, there are more discussion points than can be adequately discussed in the time available, and it is likely that not every topic will be addressed. However, everyone involved in organising this behind the scenes would like this to lead to further concrete action. If you are interested in taking the lead in any of the initiatives proposed, or even just being involved, please message Morgan on Zulip or email him, [rogers@lipn.univ-paris13.fr](mailto:rogers@lipn.univ-paris13.fr)

## Minutes

*Disclaimer: The text is not a verbatim transcription. I [Morgan] took extensive notes during the meeting when I was not talking and tried to reconstruct a coherent account from those. No AI tools were used in making these minutes.*

### Morgan introduces the meeting

MR: Welcome and thank you for attending this unofficial Applied Category Theory community meeting. Thanks to the organisers of ACT for allowing us the space to hold this meeting during the conference, so that it might lead to further discussion amongst in-person attendees.

Our aim today is to explore what we can do *together* to address the problems affecting our research community, as well as the broader communities to which we belong.

*Disclaimer:* none of the opinions expressed in this meeting are to be taken as endorsed by or representative of the organisations involved with the organisation of the conference.

In addition to my role as chair, I will be taking anonymised minutes, which I hope to distribute online by the end of the week.

I want to take this opportunity as chair to stress two points.

- 1. Science is political.** Political decisions determine who can do research and where. Funding for research has to come from somewhere. Whether government or corporate, that funding is allocated (or not allocated!) according to an agenda.

For those that know me only as an orange box on the Category Theory Zulip, I am a category theorist mainly interested in monoid actions and toposes. My background is in maths, and my research is very theoretical. In spite of this, I belong to a computer science lab, as do many of you. A reason for this is that it is much easier to obtain funding for work labelled as “theoretical computer science” than as “pure mathematics”. Further

shades of this pressure to integrate domains with greater access to funding are visible in the increasing number of applications of Category Theory to machine learning and quantum computing. I point this out not to criticise the excellent research that is being done in those areas, some of it presented at the conference this week(!) but to illustrate how politics is visibly shaping our community.

Austerity measures over the past several decades have created a slow-motion catastrophe in higher education and research. Public spending on higher education in France, where I am based, has seen unprecedented cuts in the last few years and working conditions are deteriorating. In the UK, universities are shutting down whole departments. In the US, the administration is directly attacking higher education institutions and obstructing their access to funding. In parallel, we are seeing programmes to improve access to academia by minorities and underserved groups being systematically targeted, along with attempts to undermine the credibility of academics in the public sphere.

Meanwhile, in countries impacted by conflict, the capacity to engage in research has been one of the first casualties. The genocide of Palestinians being enacted by the state of Israel has included systematic attacks on all civilian infrastructure, but I note here in particular that *there are no universities left in Gaza*. Taken to the extreme, politics can remove our ability to do any research at all, determining who gets to do research and where.

2. **Our community has unrealised potential.** Last November at an algebraic topology workshop, a mathematician told me that the reason they enjoyed their research so much was that it allowed them an *escape from reality*. I think that any of us can understand the appeal of such an escape, but *all* of us must recognize it as a privilege whose indulgence we must limit if we are to grant it to those who succeed us. We need to take action, together, if we are to sustain the existence of spaces (or even careers!) in which people can develop ideas and play with abstract structures as we do now.

[I would have liked to add: There are many things that can hold us back from taking action. Foremost is the anxiety induced by the things we're up against, coupled with work pressures which can leave us with limited time in which we feel able to act. Another is a lack of confidence to initiate action ourselves, coupled with a lack of visibility of existing actions that we

can take part in. And many of us don't feel we have the training or experience to take action.]

[Summary of agenda above (which all ran according to plan!)]

### **Sean talks on working together**

SA: Thanks for context, thanks for having me.

I am Sean A. I have a background in sociology and I am based in the Bay area. I have been involved in social movements for the past 20 years.

I want to tell you about my background to illustrate that getting involved in social action is a long-term process. It's important to "root into" the places you want to make an impact and continue that work for the long term.

[Sean's background: he was a student at a University in California where he took part in the anti-austerity movement. The student-led organisation he belonged to supported movements up and down California and internationally. At grad school he was involved in an organisation which began in the graduate student union but grew to include lecturers and researchers at the institution. He has now been community organizing for tenants in the Bay area for the past ~6 years.]

I find it impressive that we [academics] as a profession are considering how we are affected by politics and how we can claim agency over those effects.

What you need to do to make progress is "get rooted" within your universities, then connect to wider professional networks. Taking it back to folks outside the scene that you interact with day to day is important because it's there that you can really exert pressure and see how these politicised systems affect what is happening around you. It's where you can disrupt those processes and make specific demands.

Get to know who you can count on, within the department and without, that you can bring together to organise beyond your immediate group.

Where are these political systems coming to bear? Who will you be going up against and what pressure might you need to put on them to make things change? This can clarify what actions might make the most impact.

At UC Santa Cruz, at the start of the protests against the genocide in Gaza, the grad students and professors came together to disrupt the connection between the university and funding of the genocide in an association called Researchers Against War (RAW). They engaged in direct outreach. One of their successful strategies was to identify pots of money that were going towards Israel and

administrators with control over that money or strong ties to government agencies. These were the people within reach that they could directly put pressure on to achieve change. They were also successful in reaching out to other universities across the state and the world to support those efforts. Thinking about systems - what are the actions one can take in the particular corner of academia or your university you inhabit that you can have an impact. See here for more information at UCSC researchers' collective organisation: <https://labornotes.org/blogs/2024/05/how-uc-researchers-began-saying-no-military-work>

### **Haynes talks about efforts to support students and researchers in Gaza**

*Sean's slides are here: <https://math.mit.edu/~hrm/icact-2025.pdf>  
They include many links to the organisations he talks about, some of which are copied below, and some further data.*

HM: It's important to work politically. We're all involved in it whether we like it or not. The organisational efforts [Sean] mentioned have been essential at MIT too. The attacks we're experiencing in the US help us empathise with others who have been subject to such attacks much more seriously and for much longer. Most of the brick and mortar educational infrastructure has been destroyed in Gaza, but the faculty still exist: some are in Cairo and some of them are still in Gaza. Those that can are trying to provide online education for their students. MIT has extensive online learning resources. I made a proposal to MIT online learning services for what became [MITx SPOCs for Gaza](#).

I didn't know that I would be able to work directly with students in Gaza at the time, but more than half of respondents were in the region and willing to travel to access these services. The opportunity cost of this was huge for them [which shows how highly they value education].

We were also stunned by the outpouring of support from MIT students. With their assistance we were able to make it more than just an online course offering. The MITx platform was almost impossible to use as-is in Gaza. The students repackaged the material to make it more accessible and provided "psychosocial support" for them. It became a deeper community than we could have expected. These connections show the depth of empathy that students, not just MIT students but students across the country, have with their peers across the world

[Haynes shows photographs from the hackathon to develop resources for the courses and student gatherings in Gaza and Cairo.]

We received tremendous support by the American University in Cairo, who opened up classrooms and arranged transportation for students.

Right now, classes are on pause because the situation is so desperate in Gaza. It will resume when at the earliest opportunity [once the students can access food].

[Haynes shows some details of the courses offered.]

The 'Media culture and society' course is run by Ahlam Muhtaseb, who you may know as the director of the [Phoenix of Gaza VR installation](#).

If you get the chance to experience that, I would really recommend it.

We have a lot of people in Cairo as well following these causes. What sets this effort apart is the support from students and staff from thirty different institutions.

[Haynes shows a photo of a celebration after an exam in Gaza, telling us that the instructor there at AUC has been extremely kind and helpful.]

We of course realised that we were in close contact with individuals in the Gaza strip who had needs beyond the academic. We formed a [mutual aid organisation](#) to raise funds for living needs of those in Gaza. If you're looking for a way to give direct financial support, you might consider donating there.

I want to talk about a second project: the Palestinian Student Research Program (which has existed since 2020, and is an international collaboration). It is modelled on MIT's Undergraduate Research Opportunities Programme (UROP). Undergraduates are paid an hourly wage to do this research. Each project is an integral part of an ongoing research project which undergraduates can do real work on. It received an outpouring of direct financial support by alumni of MIT who don't otherwise donate to MIT.

There are more than 45 projects (>60 students) this spring, and alumni of the program assist current students. For the first time we have a research project under way in Gaza: a sociology research project around this work studying how students are able to pursue education in the midst of conflict.

Finally I want to mention two other institutions: [Academic Solidarity with Palestine](#), and [Scientists for Palestine](#).

[Each organisation provides research platforms in the forms of lectures, conferences, workshops, mentoring and faculty support in (or as close as possible to) Palestine. Haynes talks about the several high-profile researchers contributing to those efforts.]

[*Afterword*: In response to my asking what researchers in France can do, Haynes noted that Academic Solidarity for Palestine is headed by a researcher in Lille, [Christine Hubbard](#). He also pointed me to the [AURDIP](#) which is acting here in support of Palestine and those speaking out against the genocide in Gaza. Responding to my hope that category theorists would get involved in the initiative he told us about, Haynes wrote: “I don't think category theory is a thing in Palestine, but computer science definitely is! so there's plenty of opportunity there.”]

### **Anonymous contribution on the topic of online spaces (read by MR)**

MR: I would like to learn and apply category theory with the goal of writing papers and teaching. I identify with multiple minority groups and have been "self-guiding" my ACT learning outside of formal study at a university. I am obliged to work only virtually due to many personal reasons, yet I have a complex trauma that makes doing things online difficult. I think first of all, thank you for all that you're already doing that helps immeasurably, which is: this safe space to ask questions and be answered by trusted, credible experts [the CT Zulip]. In addition, especially when starting out, it is so helpful to be shown some hints and answers to questions, so I appreciate the Questions channel very much and plan to become more active in the coming year. Something elsewhere online that I have found is a tutor: human, credible feedback (the combination of real-time walk-through on a call, and comments on the document) on answers to exercises and proofs. I wonder whether the community could play a more active role in promoting such activity, as well as some people being open to mentoring others. Finally, video recordings of talks made available on YouTube are evidently indispensable, but people already have this on radar. The only questions I leave for you all are: *How do we create mutual trust? That is, how do I keep my feeling of safety in an online community while at the same time demonstrating my own trustworthiness and credibility?*

### **ACT representatives discuss organizing the conference**

JS: I should say that I am talking as a member of the program committee along with AH. The announcement of the ACT conference came after the US election and it quickly became clear that fewer people were going to submit than usual. Due to local constraints, the local organisers weren't able to provide a hybrid



conference, unfortunately. Local organisers did their best to make in-person attendees feel safe (unisex bathrooms, website announcement). I will be speaking in the community meeting on Thursday and there will be more data and information then. [AH says they have nothing to add.]  
[Slides from Thursday's session are provided [here](#).]

JB: By March the steering committee hadn't heard of any plans for enabling the current ACT to be recorded or live-streamed, or for speakers to present remotely. We asked JF [on the local organising committee] if that would be possible, and he said that the steering committee would have to raise 9000 dollars to make that possible. In general, the funding of the conference has always been done by the local organisers, so that didn't happen. We weren't happy with that outcome. We have since secured commitments from the next two organisers to make sure that they will ensure all three things [recording, live-streaming, remote participation].

Up until now there has been an alternation between the conference being hosted inside and outside the US. The next two conferences are planned for Estonia in 2026, then at MIT in the US for 2027. I was and am still worried about that: the situation in the US, especially for non-US citizens, is problematic and unlikely to improve between now and 2027. I asked whether we could consider hosting it elsewhere but for now there has been no response. It's hard to get people to volunteer to organise a large conference, and the offer (from Giole Zardini at MIT) to organise is wonderful. It would be sad to have to start again, but I think we need to consider it.

### **Open discussion** chaired by Morgan

A1: I have made suggestions for a hybrid format at other conferences. An objection I have seen raised by colleagues is that if there is the option to attend online people may not bother to attend in person and that could affect an important purpose of the conference: meetings in person which will lead to more diverse conversations (conversations about various issues in academia, new directions for research, new collaborations, just getting to know each other better). Amso, some supervisors may not want to sponsor their students to attend conferences with higher travel cost if a hybrid option is available. What can we do to convince those people?

[Added from email correspondence: I personally would really like to work on doing hybrid conferences in a better way. I am not so concerned about having fewer people present. Generally, those who don't attend do so for good reason. I also think that we can charge a registration fee for online attendance if we offer enough features for the online audience. This is something I would really like to brainstorm about.]

MR: I have heard similar objections. It's only now that the people being obstructed from attending conferences are more privileged (folks from Europe not feeling they can safely travel to the US) that people are starting to change their minds about the need for this. Ultimately, everyone benefits from the increased accessibility, as well as the online recordings that are usually easy to produce once the technology is in place for hybrid attendance.

HM: People had similar concerns for online lectures, but actually what we saw was that it forced lecturers to up their game because they needed to make the lectures worthwhile for the students attending them.

A2: A comment about alternative organisation for future instances of ACT: 2027 is far in the future, and most people involved in ACT research are young, so they don't know where they'll be in 2 years, let alone if they can host a conference. Gioele Zardini is lucky enough to know he'll be there for 4 more years (and generous enough to use that security for the benefit of our community).

A3: One of the things that drew me into this community in spite of category theory being underrepresented in South America is the strong online presence that gave me access to topics that resonated with my point of views and interests. This kind of connection made possible by the internet couldn't happen in earlier generations of researchers. My question is: because of that online aspect, are we in some way responsible for continuing to build and improve and foster online spaces for research and learning?

MR: For me personally, a reason that we're having this meeting today is because I want to make category theory and the community we've built around it accessible to as many people as possible.

JB: Something I've enjoyed seeing on the Zulip is the self-directed learning, where people can ask questions as they develop their understanding and have people around who can help them when they get stuck.

A4: Question to Sean: you aren't a member of this community, but even based on what you've seen today, what could we be doing more of?

SA: I would say that you need to find out who you can trust and see what actions you can bring into your department or professional organisation.

In terms of ensuring that folks who want to come into the US can continue to participate in research here, I can speak from my background in conflictual social movements: you have to identify barriers and take direct action to counteract them. A related effort I am involved in is the protection of international students' access to the UC. You mustn't concede immediately: those in the US need to push back on behalf of the people visiting.

MR: I have a follow-up question. I opened this meeting on a very political note; because of how things lined up, there was a natural progression towards us focusing on this conference in particular, but I want us to look outwards too: what can we do to counteract the political pressures on institutions in the US?

SA: Meetings like this are a great start, because these things are hard to talk about, and it's really important to talk about them. [That's part of the action!] As far as you can, connect with people in other departments and other universities to see what actions are already happening and what you can take part in.

[Thanks for attending if you attended, and thanks for reading if you are reading this!]

### **Further information**

Further discussion of topics addressed in this session is taking place [here](#).