



Micro-53 Survey Results

October 17 – 21, 2020

Virtual Athens, Greece

<http://www.microarch.org/micro53>

3:18 mean time to
do survey

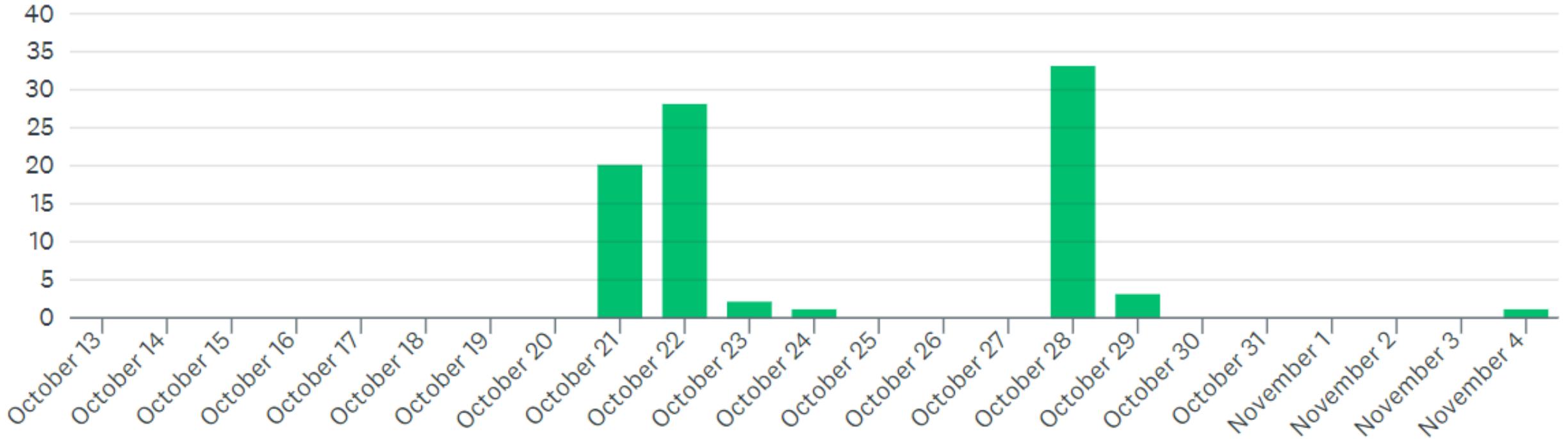
Survey Questions

1. What was your overall impression of Micro?
2. How effective was the virtual format of Micro?
3. What was your impression of Zoom's efficacy for Micro?
4. What was your impression of Whova's efficacy for Micro?
5. What approach do you prefer for questions after talks for virtual events on Zoom?
6. What is your preferred duration for virtual events on Zoom?
7. How much of Micro were you able to attend?
8. What was your impression of the MICRO Workshops and Tutorials?
9. In the future once the Covid-19 pandemic has passed, what is your preference for Micro's format?
10. Please provide any other comments.

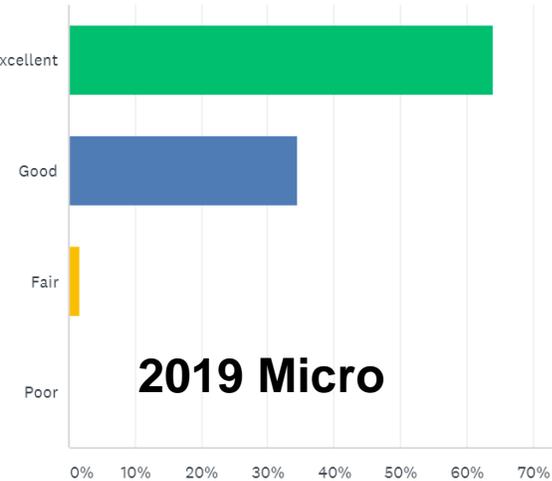
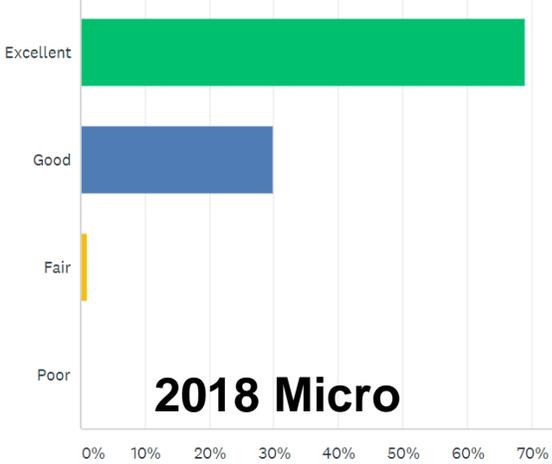
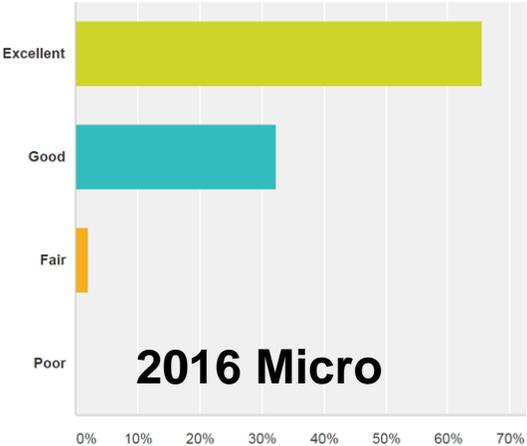
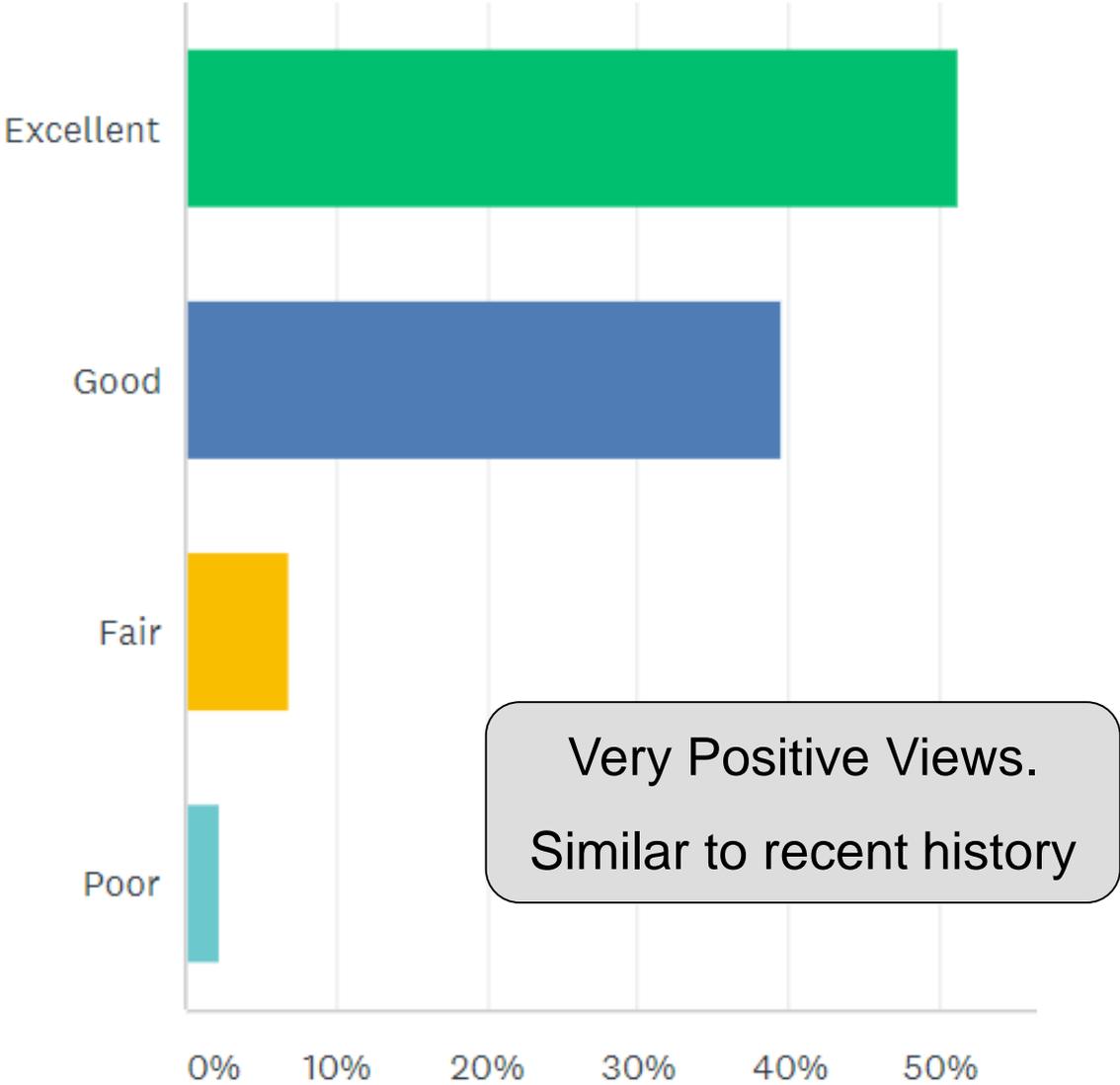
Broad Themes in Responses

1. Over 90% had Good or Excellent overall impression.
2. About 45% (the modal average) attended 1/3 - 2/3 of Micro.
3. A large majority were satisfied with Micro's virtual format, but a significant minority was not.
 - A number of suggestions for improvements were made.
4. Although most were satisfied with Zoom and Whova, Whova had a large number of negative comments.
5. Zoom's default Q&A is the majority preference for questions.
6. A slight majority liked Micro's 4-5 hours per day format, with remaining opinion split among other options.
7. Going forward, opinion is mixed and roughly equally divided among virtual options and returning to a traditional in-person only conference.
8. 11 of 12 people who addressed the question would have gone to Athens absent Covid.

Survey Response over Time

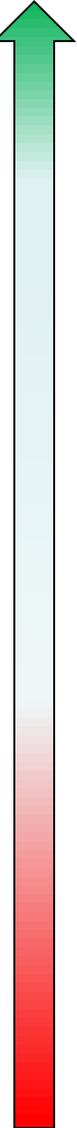


1. Overall Impression of Micro

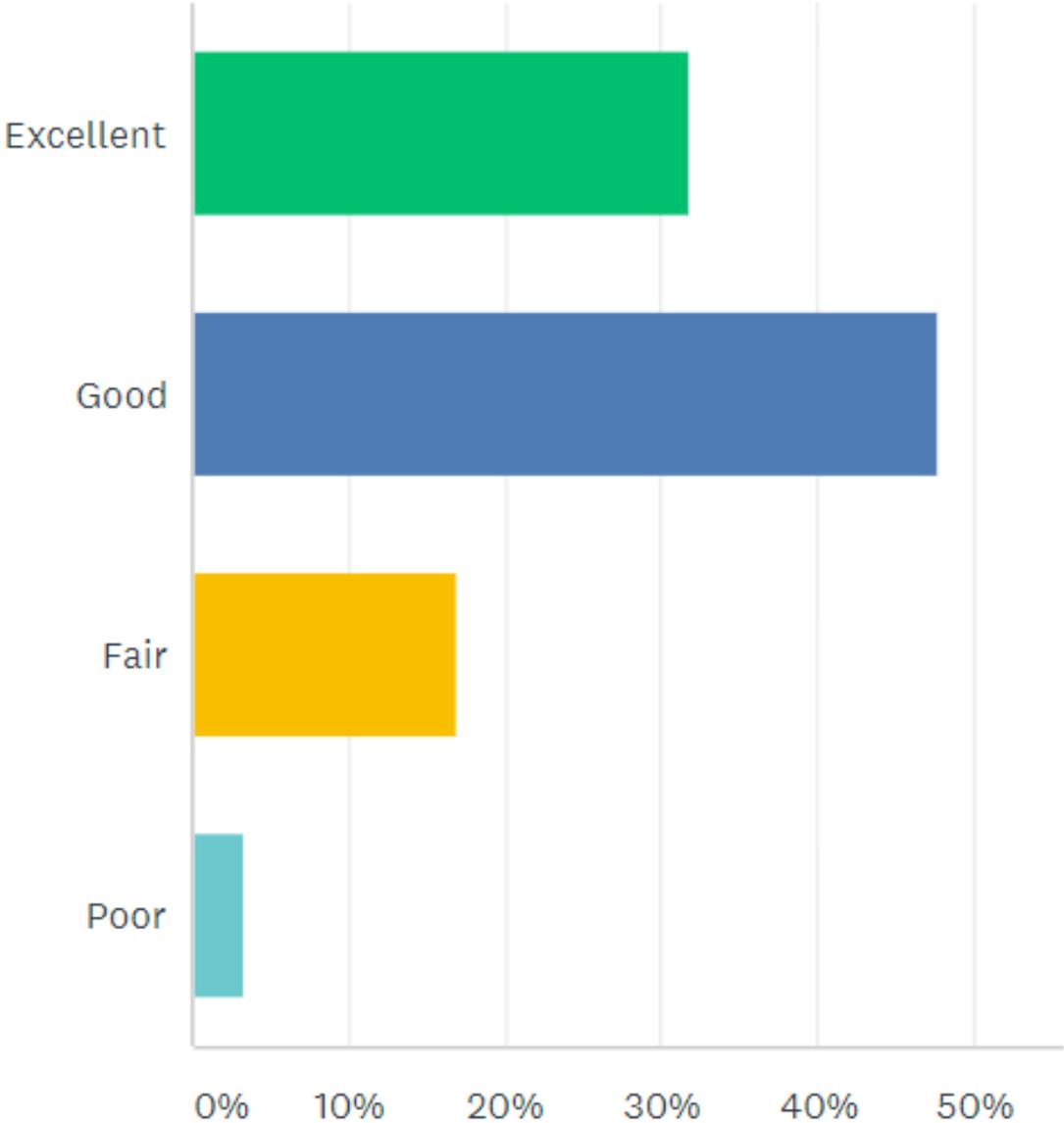


1. Overall Impression – Comments

1. Although I was able to attend only some sessions, impression from those was excellent
 2. Great organization, excellent keynotes
 3. Overall organization was great and the Whova site was easy to navigate. Talks were great and there was plenty of time for Q&A. Technical quality was very high as usual. Keynote speeches were inspirational.
 4. Despite the current situation, it was really well handled.
-
5. The online presentation videos were fantastic: we go together over Zoom with another research group and had a presentation-watching, paper-reading, and discussion session for 10 different papers. This meant that more people got more technical value out of MICRO than ever before when we would only send one or two students. However, the keynotes were not as good. The first one was a "that is shockingly obvious that communicating from small devices to the cloud would be expensive" the second one was "and what does this have to do with MICRO?". Both were very disappointing and below the bar for MICRO. The third one was good and gave a nice perspective.
-
6. Session presentation scheme (5 min talk + 10 min Q/A) was terrible. I want a normal scheme with detailed talk.
 7. Sessions were not interactive in any way. Other than gaining access to the videos (which could have been made public) and gaining access to the papers (which are already public) I got nothing out of "attending" MICRO.
 8. Too packed into three parallel sessions.



2. How effective was the virtual format of Micro?



2. How effective was the virtual format of Micro?

The Good

1. Given the constraints imposed by the virtual format, the structure used was very effective. Recorded presentations provide the benefit of offline viewing, which is very useful. It is not possible to fully replace the in-person experience, yet this virtual format work well.
2. Out of several virtual conferences this year, Micro had the best organized virtual format. Live keynotes, live presentations, live Q&A. It's the closest to "real" conference I've seen. The lightning overview of all the papers was excellent as well, really helped in choosing what to see live.
3. I did not attend any of the live sessions since they were too late in the evening for me. But I got A LOT out of watching the presentations. I have watched more talks this MICRO than I have ever attended in the past. And the ability to watch them at 1.5x speed is fantastic. You should consider allowing 20 minutes for online presentations since we can speed them up when playing.
4. Enabled wider participation. It should be continued even if the conference becomes physical again.

2. How effective was the virtual format of Micro?

The Bad

1. Lack any informal sessions or outing made the conference just a series of talks with not really any interaction for collaboration or networking. Consider trying [Gather.town](#) in the future for socials.
2. I was disappointed that the organizers didn't try anything new. This was just a "normal" conference in a virtual setting. Why were there parallel tracks?! There are many fewer constraints in a virtual format!
3. I felt the most important aspect of conference is getting to talk to more people. I think that was majorly missing in the virtual format. If we could somehow facilitate more interactions that will be great!
4. I think we should prioritize the talks and leave just a few minutes for a live Q&A, rather than the other way around. I don't see the point of following a live program only to get a relatively content-free pitch followed by 15 min of Q&A for a paper I haven't read and a talk I haven't seen.
5. There were hardly any Q&A on Whova for most sessions and hardly any discussion happened during the Q&A time for many sessions
6. When giving the talk, speakers can only see his/her screen, and there is no response. I am always afraid that I am offline.

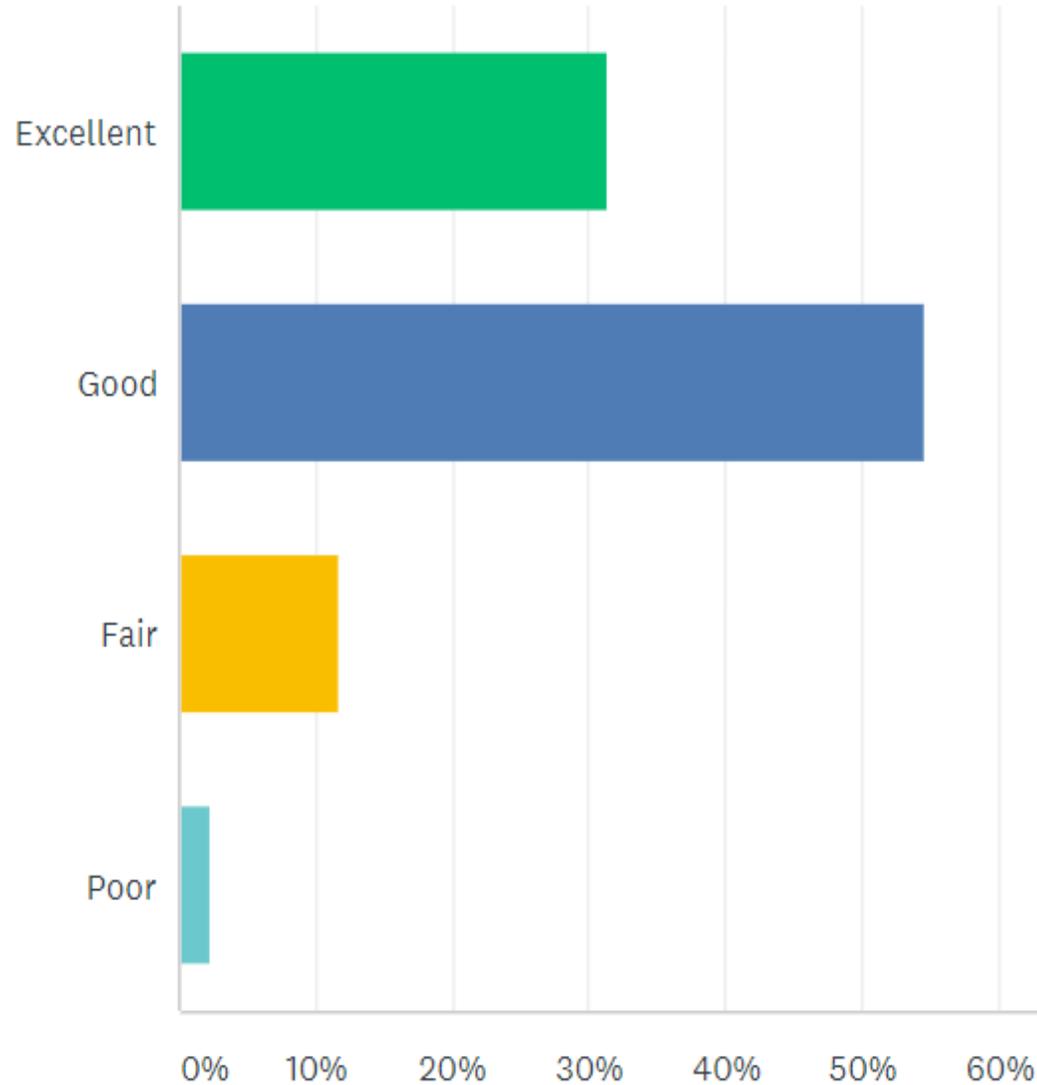
2. How effective was the virtual format of Micro?

The In-Between

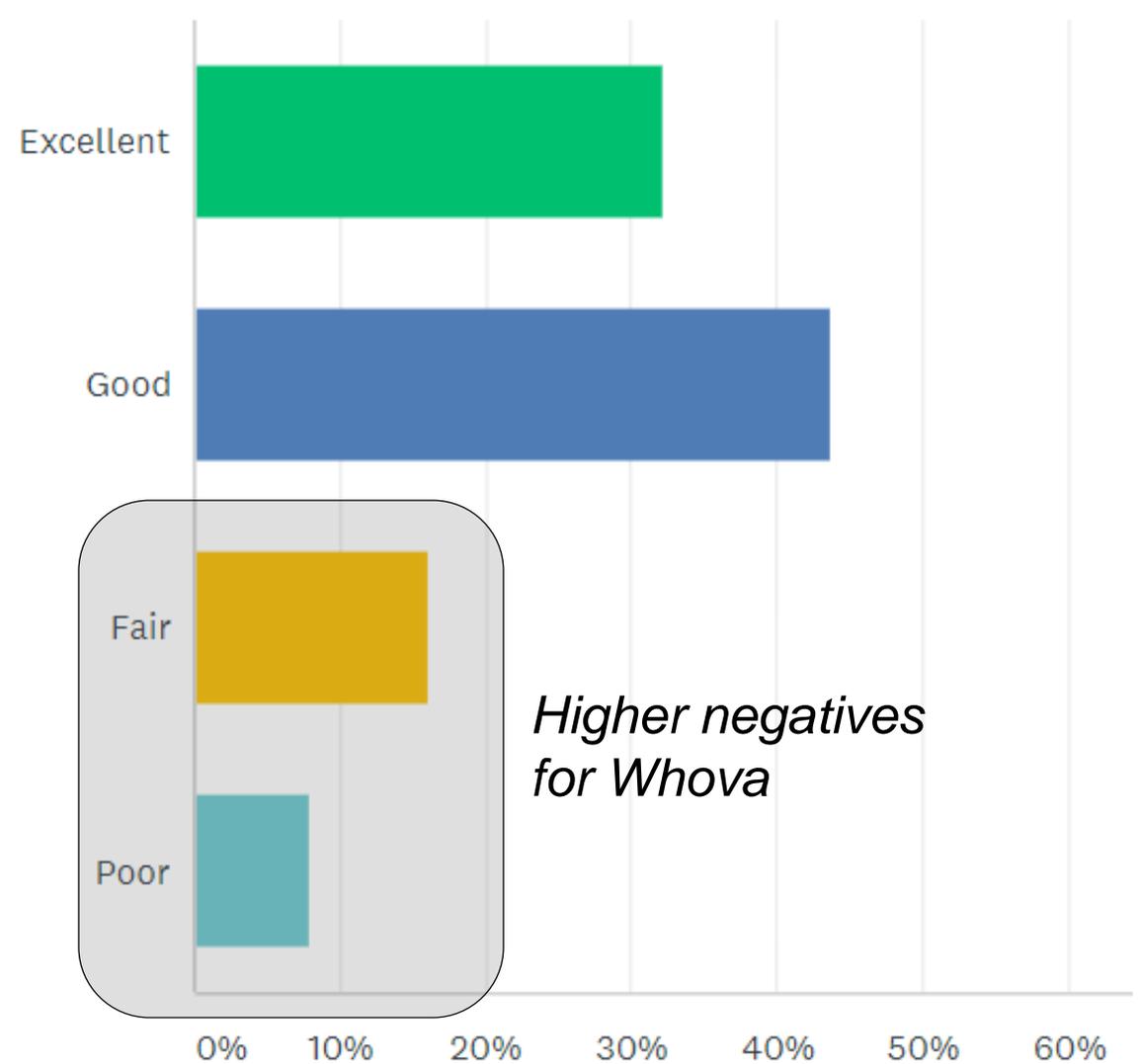
1. Virtual conferences in general kind of suck. But this is a general trend and MICRO didn't do anything to make my opinion worse.
2. Everything was fine except that there were no breaks between sessions and Whova-based video sessions did not have audio when launched from Chrome.
3. I was satisfied with the zoom presentations, but it was not as much satisfying that I was not able to meet others in person. I guess this was the best that could be done in the current pandemic situation.

3. What was your impression of Zoom's efficacy for Micro?

Zoom



Whova



3. What was your impression of Zoom's efficacy for Micro?

The Good + The In-Between

1. It was good except for the first day.
2. Feature to promote questioners to panelists and ask live was appreciable.
3. I never even run into a technical limitation, like a whova link not loading etc
4. Must use non-chrome browser for zoom to use desktop application. Otherwise perfect.
5. Using zoom was fine for broadcasting, but it's ineffective as a discussion platform.
6. It makes sense to use Zoom for talks, but many presenters still had issues using it.
7. Some issues but not bad. Youtube streaming would likely have been much better and less costly.

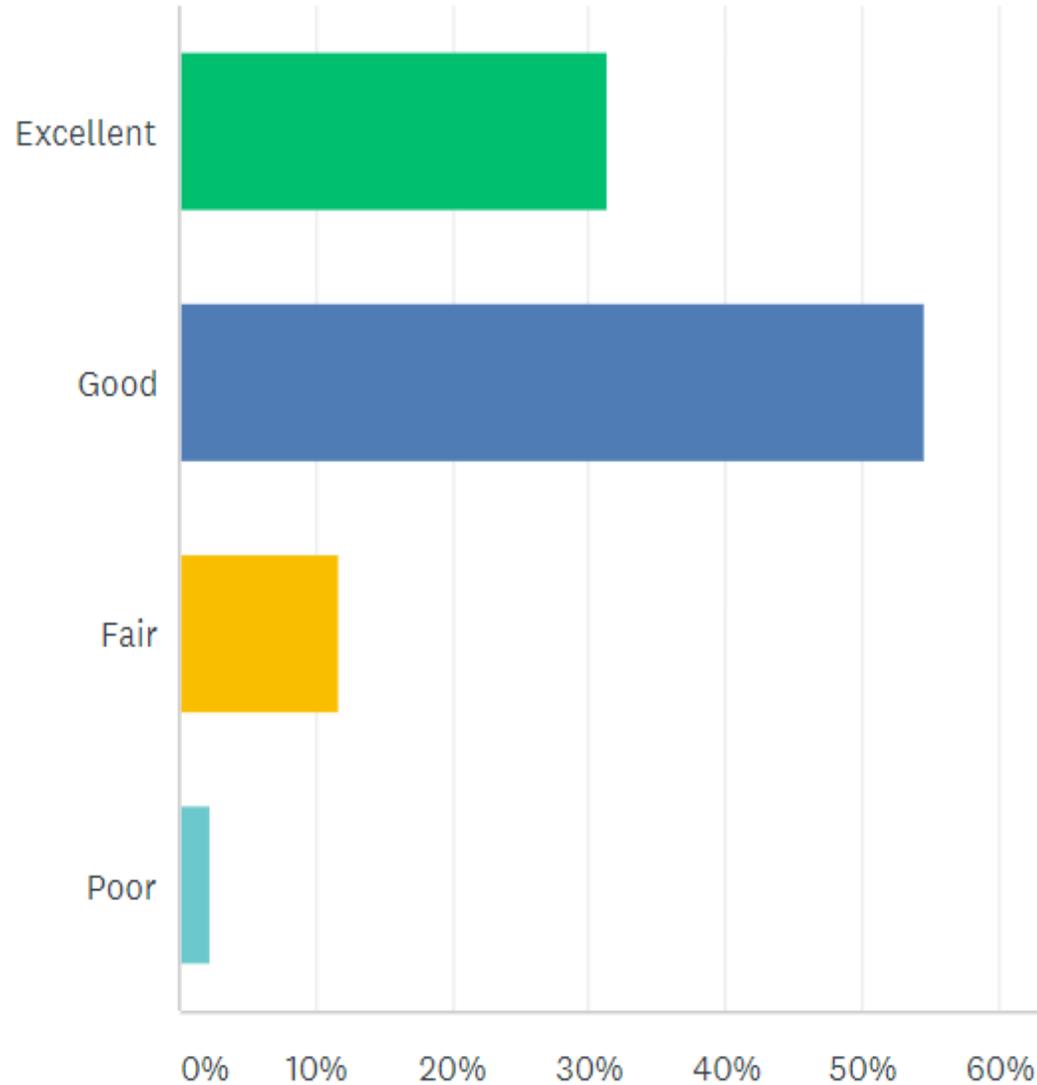
3. What was your impression of Zoom's efficacy for Micro?

The Bad

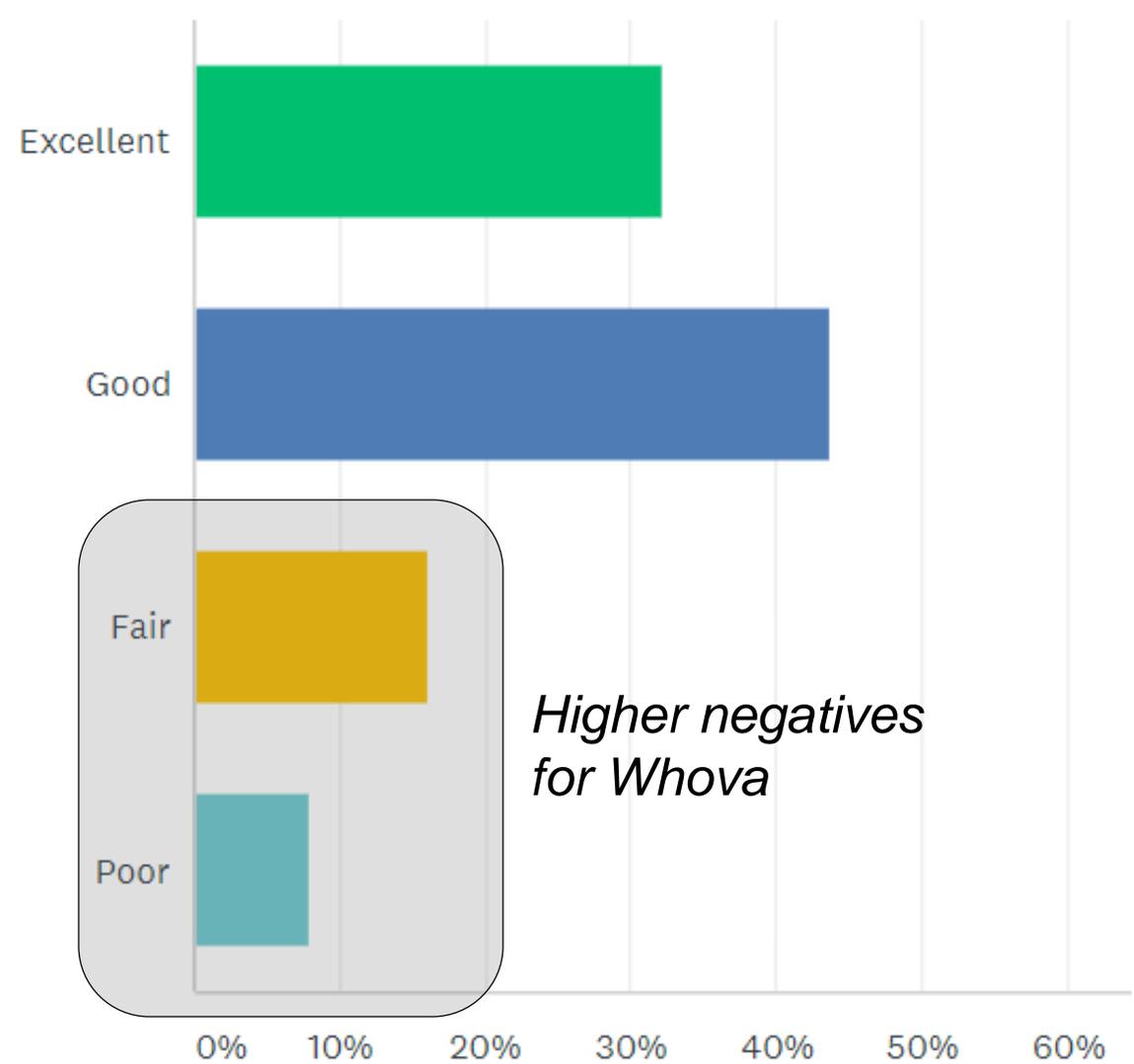
1. There really needs to be short breaks just like a regular conference. I preferred the way IEEE Quantum Week used Zoom (regular Zoom meetings where you could see all other participants).
2. Would be better have direct zoom link posted in every session rather to sign in from whova, which sometime the quality was poor.
3. Sometimes the audio quality was not the best (which is of course understandable, but still may be improved).
4. some lag occasionally
5. sometimes lagging, noisy voices, etc.
6. Doesn't work well with Chrome, which is mildly annoying.
7. Voice was not working on desktop SDK. So had to use voice on Whova mobile app.
8. When giving the talk, speakers can only seem his/her screen, and there is no response. I am always afraid that I am offline.

4. What was your impression of Whova's efficacy for Micro?

Zoom



Whova



4. What was your impression of Whova's efficacy for Micro?

The Good

1. It was well organized and had good UI/UX
2. same [I never even run into a technical limitation, like a whova link not loading etc]

The In-Between

1. The Q&A section of Whova tells a session chair will give a link to the speakers, but the practice did not follow this rule. If they match in the future or pre-talk announcement can be broadcast, it may be much better.
2. Whova is at first a bit non-intuitive, but I enjoyed how it is complete and can resume at one place all the information on several platforms.
3. I'm old-school, I prefer desktop computers. So I was not fond of the constant nagging to download an app on my smartphone. Why would I want to watch a presentation on a 5" screen? The desktop browser interface was otherwise OK. I wish there had been an easier way to see the names of the papers in the various sessions on the agenda. Right now the only way was to open that session together with the Zoom stream.

4. What was your impression of Whova's efficacy for Micro?

The Bad – 1

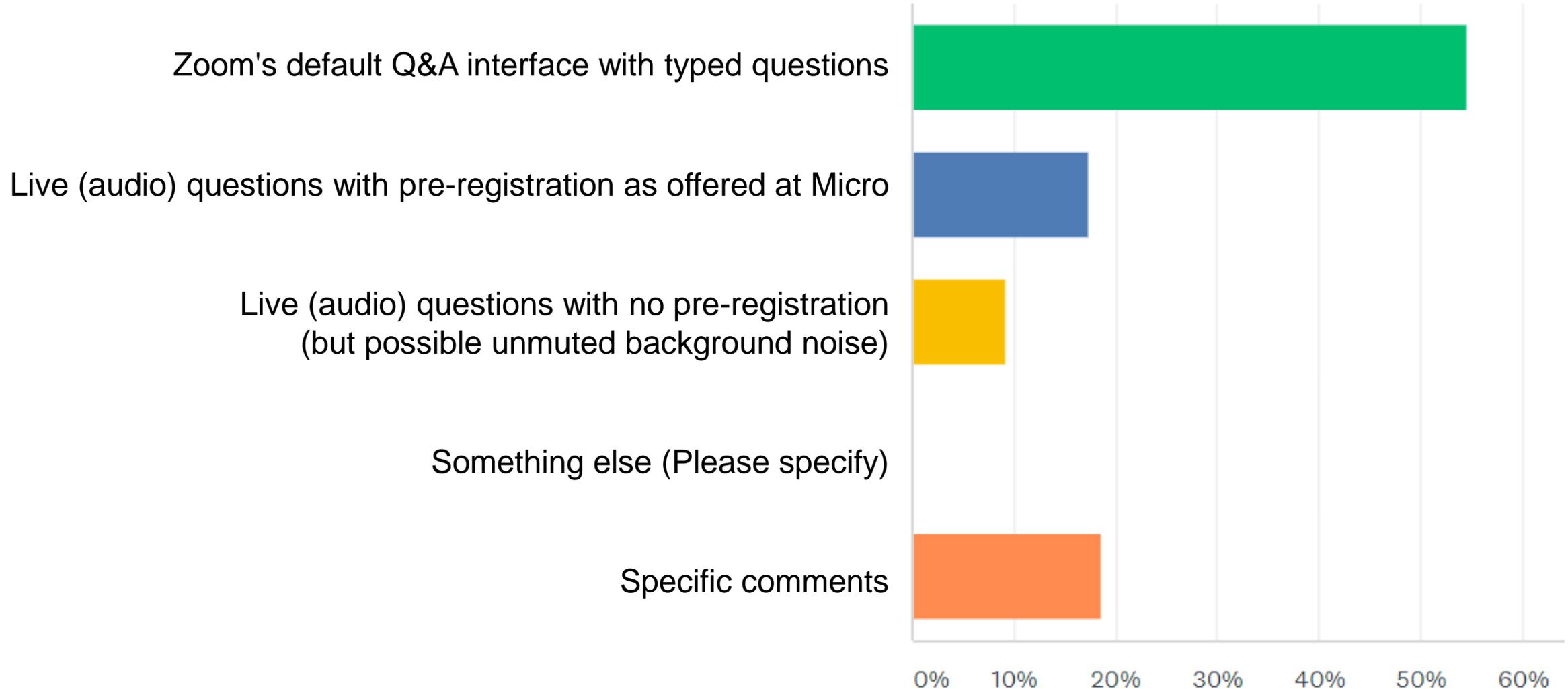
1. Whova is optimized for mobile app during a conference. It wasn't good for a full-virtual app. Most features don't work or don't work well on desktop. Very hard to follow and organize on desktop.
2. It is unfortunate Whova requires installation of an app and then bothers you with all the notifications
3. Whova's free-form discussion boards and meetups don't work for me; they could at least be moderated to keep two people from dominating all discussions. I would prefer just being emailed the schedule with Zoom links.
4. Whova has terrible compatibility with different browsers, and I found using it to be a miserable experience. At some point, I was just directly using the Zoom links for sessions and my talk, and even then, Whova hid the Zoom links and tried to force me to use the broken embedded video player. Please directly send out the Zoom links next time.
5. Whova wasn't fully utilized to its potential, and a lot of session chairs didn't look at questions on Whova at all.
6. I think we should explore other solutions beside whova. The web interface has improved since ISCA but I don't think it really supports interaction among attendees in an efficient manner.
7. Multiple placers to ask questions on a presentation ... ideally it would be centralized and everyone could see the questions in one spot

4. What was your impression of Whova's efficacy for Micro?

The Bad – 2

1. Should work from multiple browsers (didn't with Chrome). Worked well on Android based mobile app.
2. The people asking questions had astonishingly bad audio. That should have been tested beforehand.
3. Whova really needs to allow people to do everything in a web browser (e.g., on a laptop). Since everything is virtual, there is literally no reason to use their app (unless you want to watch people's talks on your tiny phone screen instead, I guess). Again, not a MICRO specific problem though.
4. Extremely hard to navigate; I never did find the direct zoom link. I have never had a good Whova experience for any conference I've attended.
5. Is there something worse than poor. Whova is a giant mess which is difficult to use, ineffective, and ugly.
6. I've had this complaint about Whova for all virtual conferences so far, and it is still the case: I hate that some Whova functionality is for mobile only. For example, seeing other peoples' profiles and seeing statistics for my session like who's watched it. I want all functionality to be available on desktop too, and I think conference organizers need to put pressure on Whova to make it happen.
7. Whova is not good. Poor platform on laptop. Not intuitive. Does not support Google Chrome well. Why not just use Youtube + Zoom?

5. What approach do you prefer for questions after talks for virtual events on Zoom?



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p.1

1. The typed comments + pre-registered live audio worked well
2. Both A and B [Zoom Q&A + Live]
3. a combination of the first two options
4. Hybrid: typed and live with preregistration
5. I prefer Zoom normal talk (presentation) and typed Q&A. Typed Q&A is preferable because online voice has sometimes distorted.
6. I prefer live questions and actually seeing people's video if possible (with the option to type questions in the Zoom chat) pre-registration doesn't make sense since I don't know if I'll have a question. The Zoom co-host should ensure people are muted to prevent the background noise problem.
7. It would be better to see audience and the speaker themselves, during Q&A session. During the Q&A session, I can see nothing, but still my slides and screen. I would like to see the audience and myself.

5. What approach do you prefer for questions after talks for virtual events on Zoom?

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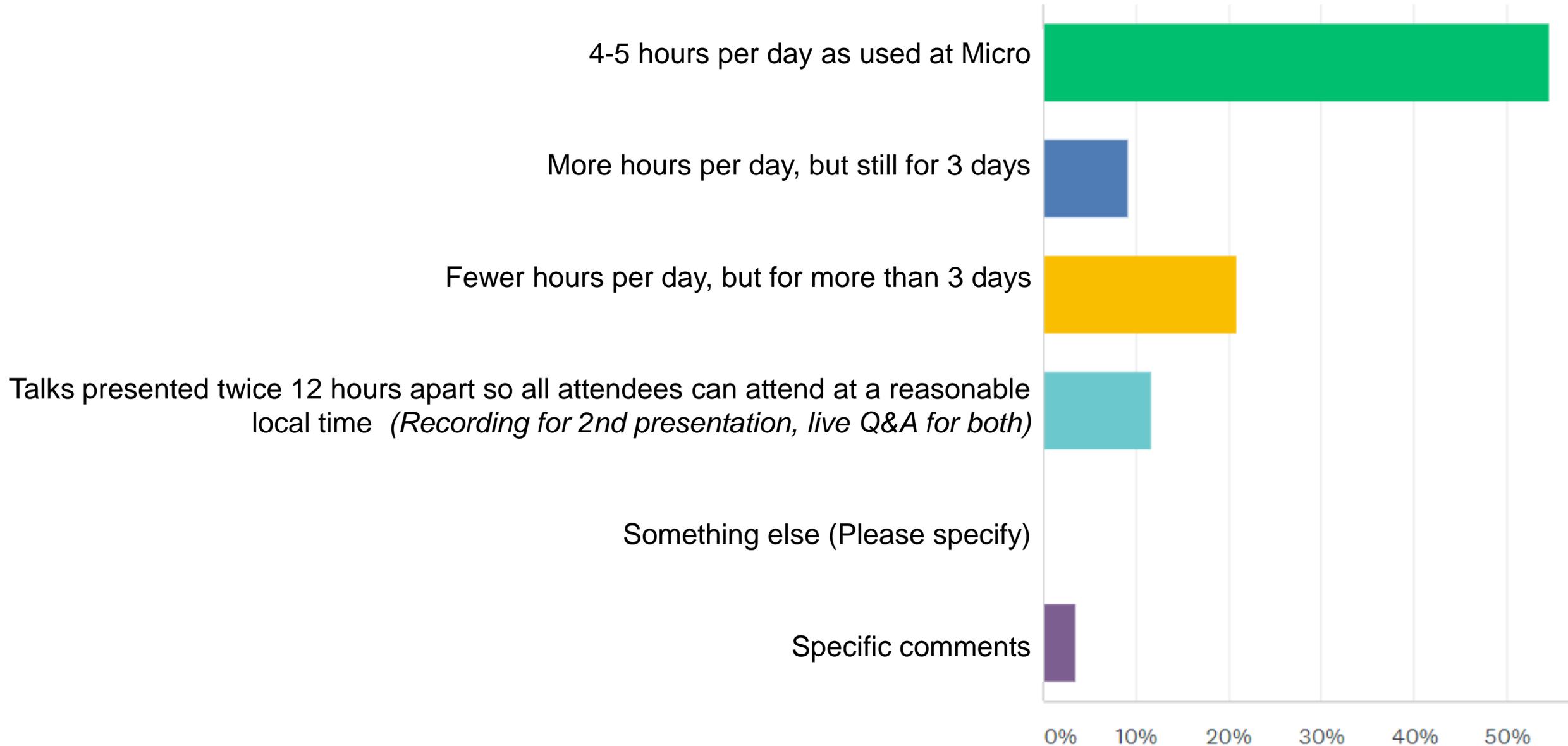
8. Some feature when the session chair is allowed to unmute a person would be great to have.
9. Zoom's default, but moderated by the session chair. If presentations are pre-recorded, they could also be answered during the presentation by the author(s).
10. I guess that the raise hand option could be of use. People wanting to ask could queue in a "raise your hand" FIFO and chair would unmute.
11. Typed questions. We watch the presentations off-line, so people should ask questions based on that, not try to come up with them after the short intro. The moderator can then pick good questions from that list. If no one who watched the presentation has questions, then the time should be used elsewhere.
12. Typed questions are best option in my opinion, as there are just 10 minutes for questions, and if the person asking has technical problems, this can mean a considerable waste of time.

5. What approach do you prefer for questions after talks for virtual events on Zoom?

p.3

9. Questions asked by the session chair
10. I would recommend that we don't assume people will listen to the talks ahead of time. In my experience, people don't have the time to do that and attend the talks, and it makes it so only the session chair asks questions. I think it would be better to have authors give a 10 minute live talk with 5 minutes of questions, or (if slots are longer), 15 minute talk with 3 minutes of questions.
11. Something that allowed for a real back and forth would have been great. Why not have a slack or something similar for discussion? Another suggestion: Breakout rooms for each presenter where you can enter and ask questions then leave. Kind of like a poster session.
12. There were way too many places to post questions, and session chairs had difficulty moderating questions across all the options (Whova Q&A, Whova chat, Zoom Q&A, Zoom chat, live questioners...). The ways to ask questions need to be consolidated. And sometimes the session chairs just sat in silence while waiting for questions.

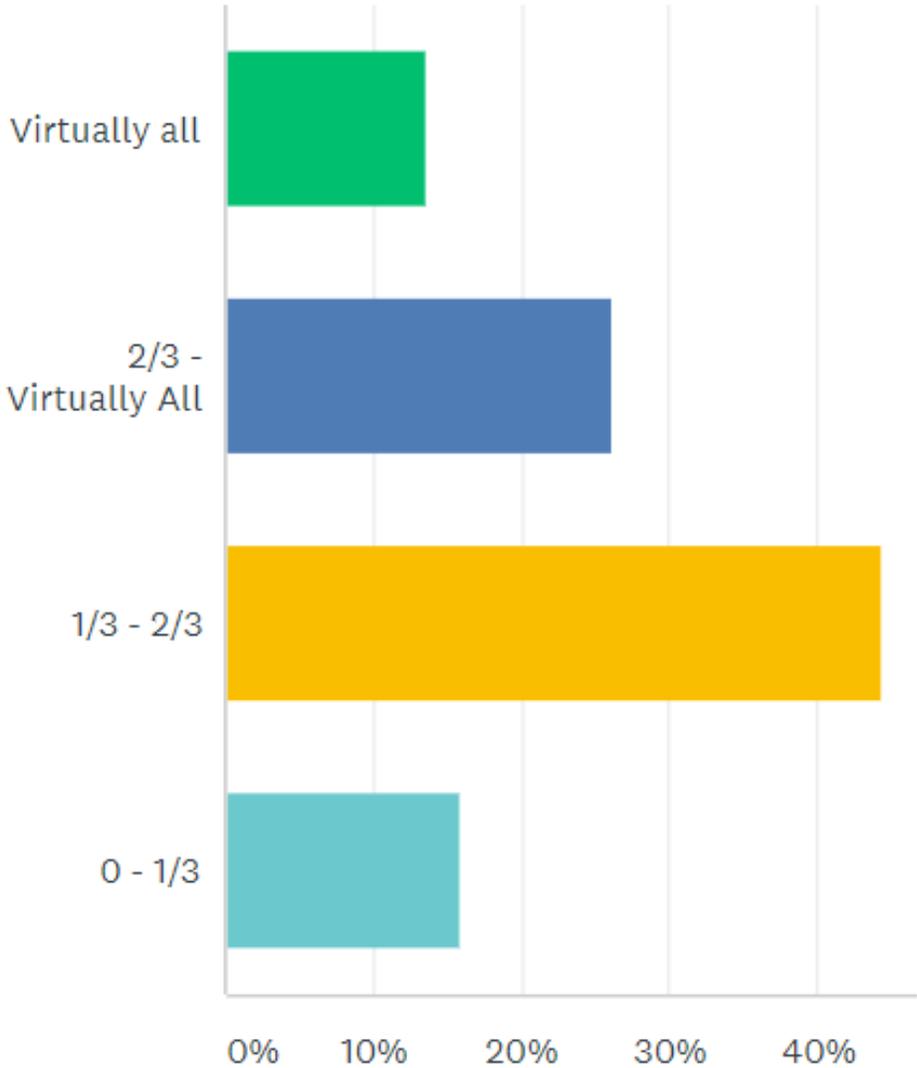
6. What is your preferred duration for virtual events on Zoom?



6. What is your preferred duration for virtual events on Zoom?

1. 4-5 hours per day, albeit with some coffee breaks between sessions. It was hard to sit through the entire day's program in one stretch.
2. 4-5 hrs/day as in Micro but with 15 minutes break between events/sessions
3. Doesn't matter. We watched the online presentations the week before at our leisure. The only live parts I attended were the keynotes.

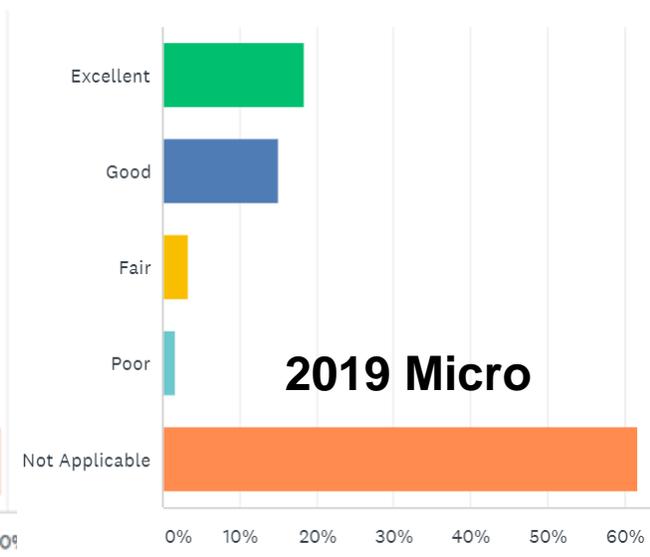
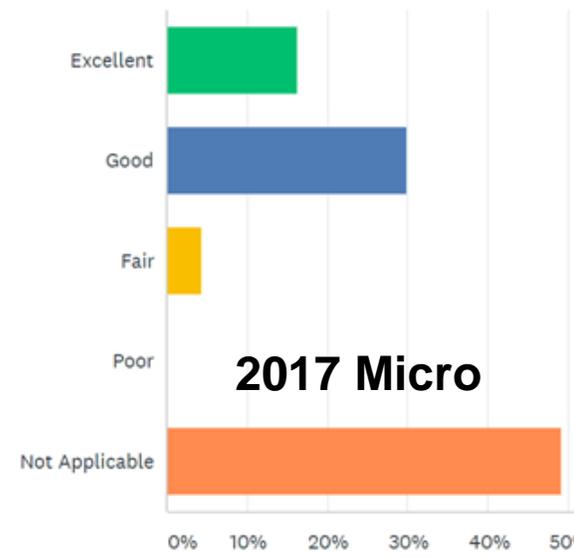
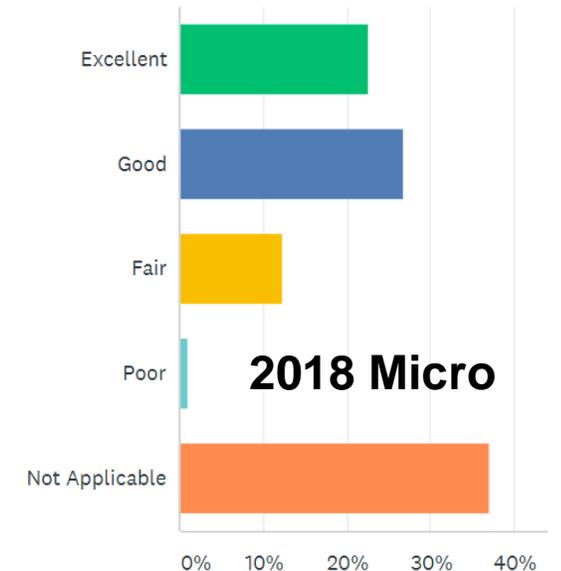
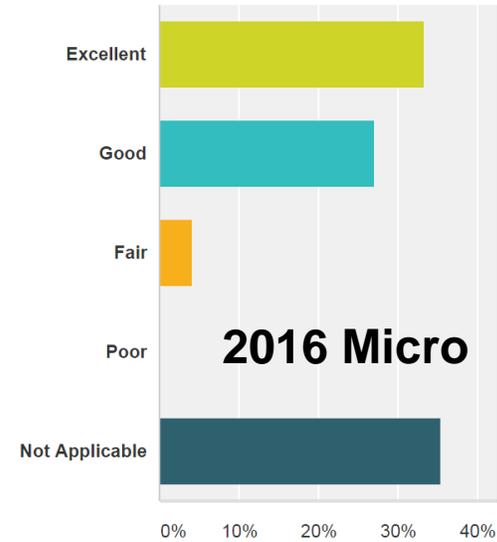
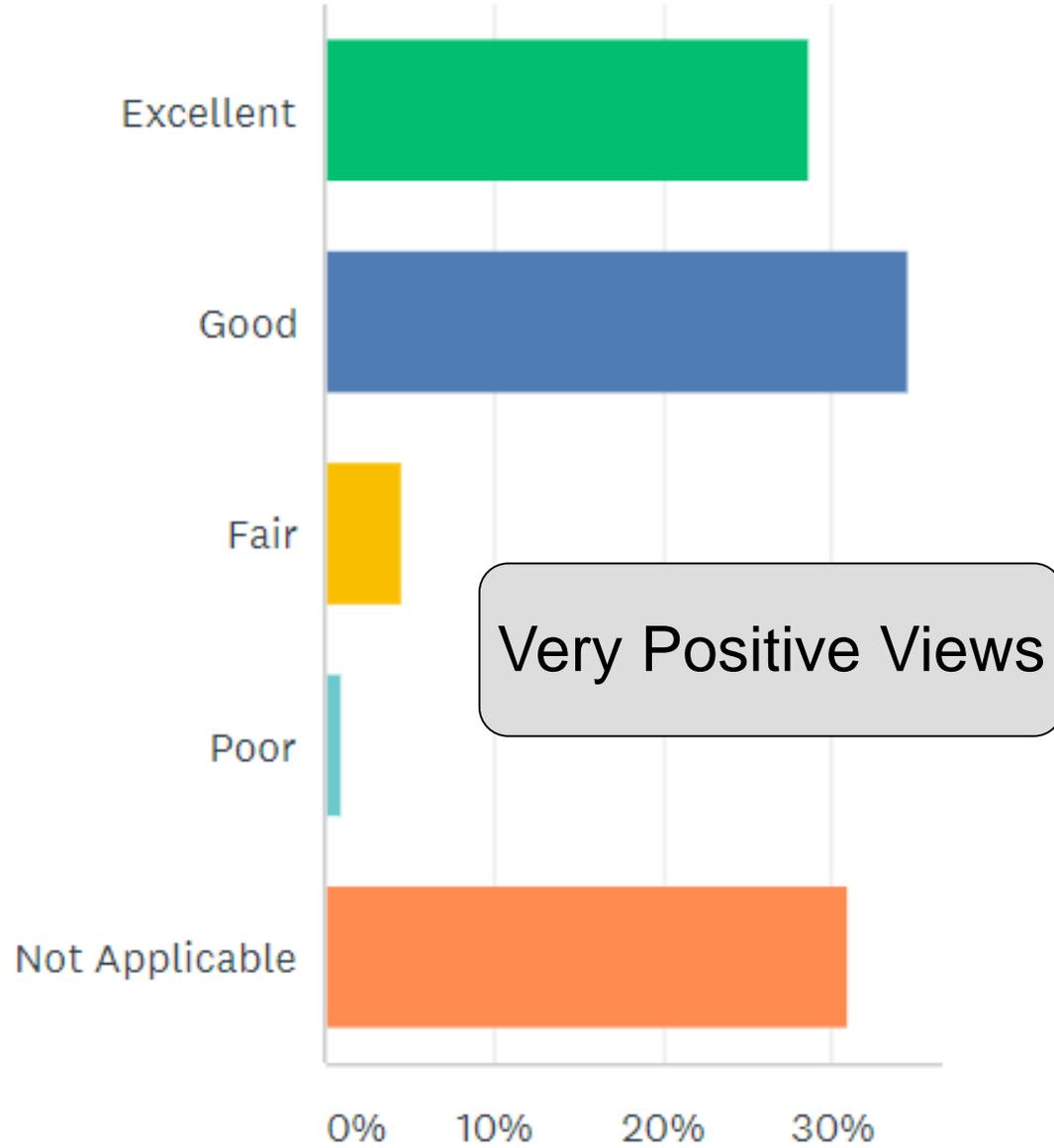
7. How much of Micro were you able to attend?



7. How much of Micro were you able to attend?

1. Had to split my time between MICRO and SOCC.
2. I registered but missed most of it, due to other commitments.
3. Due to lack of breaks I missed part of keynotes and 1-2 paper presentations
4. Recordings were not made available in a timely fashion - 5-7:30 is tricky for UK to join live, due to family responsibilities - school collection and cooking etc.
5. Only watched the keynotes live, but watched over 1/3 of the talk presentations. (And I will watch more over the next few weeks-- they should ABSOLUTELY be put up on a public YouTube channel for the future.)
6. I disappointed session presentation scheme (5 min talk and 10 min Q&A). So I did not attend after the first session.
7. because of my PDT schedule, there were many conflicts with work.
8. I didn't find it worth the effort to attend most of micro.

8. Workshops and Tutorials



9. After Covid, what is your preference for Micro's format?

Return to traditional format of Micro with physical site, in-person presentations, and in-person attendance only

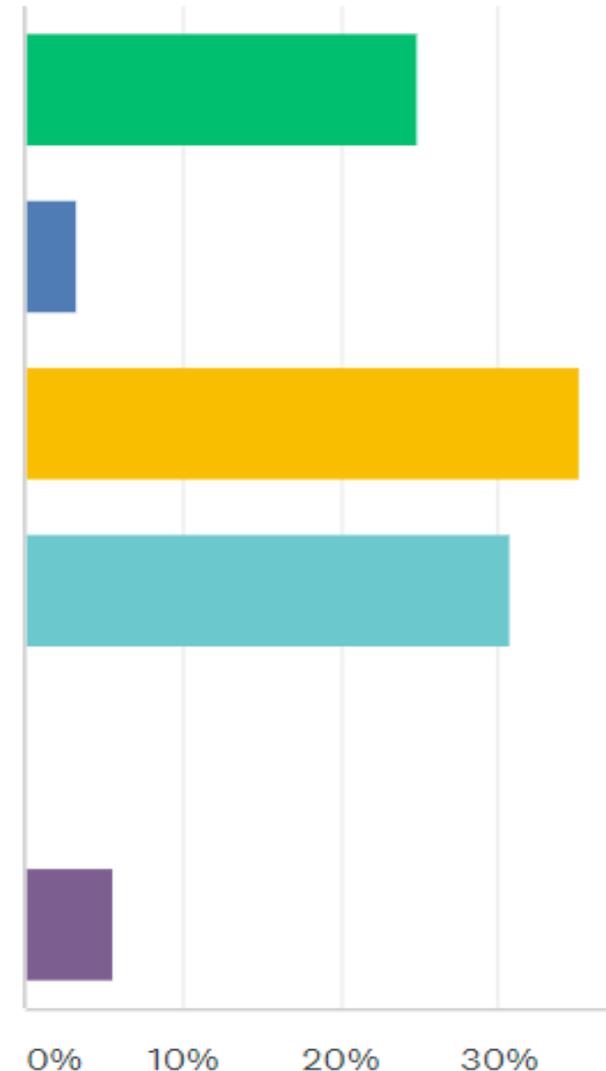
Keep virtual-only format

Have hybrid in which presenters are physically present, but attendees can be in-person or virtual

Have hybrid in which both presenters and attendees have the option to be in-person or virtual

Something else (Please specify)

Specific comments



9. After Covid, what is your preference for Micro's format?

1. This is not an answer, but I prefer the short 10~15min. virtual presentation, only down side is lack of social events if it's fully virtual.
2. Hybrid is the way to go, but we need to somehow incentivize in-person attendance.
3. More coordination among other architecture conferences are important. some number of hybrid and some number of in-person only will be great.
4. Everything in person but Q&A, and Talks to be recorded and published online.
5. It's clear that there is MUCH more value to be had by having the presentations available ahead of the conference and online since we can watch them with our students and have discussions. That tells me that the technical presentations are really only an excuse to get people together for a conference. Given this experience, I would recommend re-evaluating the format to figure out how the in-person meeting can give value beyond what we get from watching pre-recorded videos. E.g., don't focus on 15 min presentations with 5 min of questions: focus on something that generates discussions. Maybe 3 min presentations of 5 papers followed by a 45 minute panel/group discussion?

10. Other Comments – Compliments

1. Meet a senior architect program was great. Thank you for the arrangement.
2. Excellently organized, good content. Would appreciate more deeply technical keynotes from senior architects.
3. Thank you so much for the commendable efforts put in by the organizers to make this event successful. It was really interactive, engaging, and insightful.

10. Other Comments – Athens (1)

Only 1 of 12 say
would not have
gone to Athens

1. Would have gone and will be going to Athens next year!
2. Was very excited to visit Athens, but now I can look forward to seeing it next year :)
3. I would have been participating in Athens and I will be there next year!
4. Hope to be in Athens next year!
5. If we had gone to Athens everything would be in person and I believe that could definitely made all the sessions better. Thank you,
6. I would have attended in person. I believe in-person presentation and attendance improves the engagement of most people. At the same time, keeping the option for virtual presentation and attendance will continue to allow students who don't have financial support from their departments to participate.
7. I would have gone to Athens if Covid-19 has not happened. It is of paramount importance to have physical presence at the conferences. It produces more fruitful conversations that can lead to new ideas and collaborations. However, I believe that having the material online is something that should be considered for the future. Other record the presentations and post them or have pre-recordings and the possibility to answer questions as it was this time.

10. Other Comments – Athens (2)

8. I would have attended in Athens if possible. - Keynotes were good. - The Q&A sessions were a decent substitutes for live talks. - The networking aspect of MICRO was completely absent this year and Whova doesn't cut it (for me or my busy advisor).
9. Last keynote was the best. Physical Athens would have been better. 3 parallel sessions is a bad idea. Too much overlap. A lot of uninteresting papers especially on machine learning accelerators. Maybe it is time to have a higher bar on such papers?
10. Had the conference been in person, I wouldn't have been able to attend it, so this format was really good. Maybe the possibility to attend online can help more people to join. However, being in person provides much better opportunities for meeting and talking with other colleagues. Thus, I think that having the conference take place physically at Athens, but allowing online attendance is the way to go. Besides that, it was a wonderful conference, thank you very much for it, and hope the best for next year's.
11. I'm very disappointed that all of the talks are behind a paywall. We have an incredible opportunity to increase the equity in our scientific field right now by making our science open to all. Everyone went to the trouble of making videos. Why can't they be opt-out public? Putting science behind a paywall is very disappointing. **I probably wouldn't have gone to Athens** this year since ASPLOS and ISCA were also in Europe.

10. Other Comments – Athens (3)

12. I would have gone to Athens if the conference took place in-person (unless some business needs of my job didn't allow it). There is no replacement to the in-person interactions among attendees and speakers. Apparently, the keynote live presentations were not recorded (have not found links to them). I would be very beneficial to also have those sessions recorded for offline viewing. The conference website has the papers; it would be beneficial to also have the actual presentations. The material is available indirectly through the recording of the presentations, having the actual files would be advantageous. Don't have a specific solution on how to do this: have the equivalent to the coffee breaks in a virtual format. Zoom offers "breakout rooms" but participants are assigned to the rooms. Idea would be to display the list of people in each breakout room (or equivalent) and let others choose which room to join and leave at their discretion. A few years ago there was a trend towards "virtual worlds" (eg, Second SecondLife), which did not work too well due to technology limitations at that time. Perhaps the advances in recent years might make it possible nowadays to make them more effective as a virtual coffee room. Overall, given the constraints from the current conditions, the organizers did an excellent job in transforming the conference into this virtual format. Congratulations to the entire organizing committee, and the Chairs in particular. Thanks for a job done so well...!!!

10. Other Comments – Prefer Virtual

1. I really like the virtual format. The sessions were well organized and the session chairs maintained the time slots so well that it was possible to switch sessions, watch paper 1 from track A, papers 2, 3 from track B, 4 from track A and 5 from track C. Good work! This is the benefit of the virtual format that would be unthinkable in a physical conference. The keynotes were excellent, especially Monday's keynote. I would not have attended a physical conference as it is a significant expense of both time and money and I didn't have a paper at Micro to justify that expense. The virtual format lets me attend my work (I'm in Eastern Europe and my workday ends just as the conference begins) and the price is so small that it would be a sin not to attend! :)

10. Other Comments – Prefer Physical (1)

1. I prefer in-person presentations as every attendee is in the same time zone.
2. There's definitely great value in attending the conference live, and in person. It wasn't easy to network and meet new people via virtual conference. But making a virtual option available at least opens it up to rest of the world and provides more participation from a broader audience, especially those who can't afford to travel to the conference.
3. I'm glad to be part of the event being the first time it's awesome but how perfect will it be if it was a physical in attendance. It would have been a great experience for me to explore more than been confined in the four walls of my room. Although it was educative and what appreciating the organizers for the good work because I was able to learn a lot while missing out the cheering atmosphere.
4. Again, none of my comments above should be seen as specifically directed towards Dimitris and his staff -- they did an amazing job! I just think the current virtual format does presenters (especially students) no favors, and is somewhat dull and boring.

10. Other Comments – Prefer Physical (2)

5. The in-person format is essential for meaningful, productive conversations. While the virtual format is good for delivering talks (and talk videos should be widely available, or online), some of the really great stuff happens in the time when everybody does not have somewhere else to go (another Zoom meeting, etc.) and can discuss at length with other people. I personally would have gone to Athens if Covid-19 hadn't happened. But I also want people without the financial means to travel to be able to have access: to be able to see the talks and ask questions. I was a presenter at MICRO and I felt there was a lot of work, between the 15-minute talk, 90-sec lightning talk, and 4-5 minute live talk (and Q&A), but I also concede that I don't know of a better format. Nevertheless, thank you for running as smooth a conference it could be!
6. Virtual conferences may work for some, but they miss a crucial element of in-person conferences: informal interactions with the community. Talks and Q&A are nice, but it's more important to catch up with colleagues in the hallway track, have serendipitous interactions that lead to new collaborations, etc. I find it impossible to dedicate the virtual format any attention. Traveling to a conference is a forcing function to take some time off; otherwise, I can't block existing commitments (teaching, meetings, etc.). Moreover, since all of it is online, I don't feel like I'm really missing anything. I can read the papers later, and I delude myself into thinking I'll watch the presentations (but I won't---I'll read the paper, or read through the slides if I need a quick skim). Maybe I'm just old and busy and we should be thinking of conferences as primarily benefiting students, but I'm not sure they get that much out of it either. Since registration is affordable, I told my students they could all register, but most didn't, and the two who did didn't attend more than a few sessions. So please, please, please, let's not use the pandemic to move MICRO online. We may as well make it a journal.

10. Other Comments – Posting Material

1. It would be better if the slides of keynotes can also be posted on MICRO website.
2. Please make live session recordings available on the same day if possible! Thank you - that would help people who can't join live - I imagine that might be more than 1/3 of the MICRO attendees.
3. It's clear to me that there is MUCH more value to be had by having the presentations available ahead of the conference and online since we can watch them with our students and have discussions. That not only provides far wider dissemination (all the students in the group see it) but also much better learning (we have an active discussion that is not possible at the actual conference after each talk). That tells me that the technical presentations are really only an excuse to get people together for an in-person conference. Given this experience, I would recommend re-evaluating the format to figure out how the in-person meeting can give value beyond what we get from watching online videos. E.g., don't focus on 15 min presentations with 5 min of questions: focus on something that generates discussions. Maybe 3 min presentations of 5 papers followed by a 45 minute panel/group discussion? Require online presentations of 15 minutes and make them available before the conference. Get people to watch them as preparation for an in-person discussion of a topic. If you can achieve that, then the conference will be incredibly valuable. Otherwise we'll just go back to a dark room with half the people looking at their computers while someone gives a live version of a YouTube presentation video on a big screen. Keynotes: that was embarrassing. The first was poor. The second was terrible. The third was good. This is MICRO: get people who are going to talk about architecture, and force them to balance talking about their own achievements with giving a big-picture.

10. Other Comments – Conference Timetable

1. Short 10~15min. presentations are good, even if we go back to physical meetings.
2. Session scheme (5 min talk + 10 min Q&A) prevents people who did not have much time to see video and read paper). The best thing of hearing talk is to understand study easily without reading paper and consuming much time.
3. Besides my issues with mobile-only functionality for Whova, I have one other major complaint: there were no breaks at all each day. Not just did lunch occur during the middle of each day's sessions for me, there needs to be a short break between each session for things like allowing the presenters to fix technical issues (of which there were many) and allowing the audience to have a few minutes to get water or go to the restroom.
4. The idea of per-day lightning talk movies is good, but it would be better if the lightning talk video of each paper was available (separately) along with the full talk video.
5. I find it concerning that the discussion boards on technical topics are used by a few people at best. There is a wealth of knowledge that students can be acquiring here and that is not happening via this means. The best solution I can think of is encouraging veterans of the field to be more proactive here. I know when I did that it did create greater activity.

10. Other Comments – Keynotes, Artifacts

1. Bobbie Manne's keynote was a highlight, and I likely would not have been able to attend (as a student without a paper this year) in a non-virtual setting.
2. 2nd keynote was disappointing in that it did not provide any insights to the conference. Important information about the kernels/algorithms could not be disclosed. What is the point of presenting on such an important topic without discussing the key lessons learned from accelerating an application to computer architects? I would have traveled to the physical conference site.

Also see comments on [p.32](#) about Keynotes

3. Artifact evaluation or even the simulators used for baseline result should be checked. Many papers used gem5 for multithread applications results. Currently since more than a year officially gem5 releases cannot support multithreaded applications but still people are able to get results. Are reviewers ok with authors using 5 year old simulator code for result? Some paper references leads to invalid pages on internet, is it not important that a freshly published paper have working links in their references?