Tips for an effective remote defense

**Zoom works great:** I’ve seen up to ~50 folks attending the talk remotely and slides with video. Everything connection wise worked well except for a single committee member with some minor freezing during the private defense.

**Have backup options:** Give yourself time and backups in case things go wrong. Set up the connection early (15+ minutes) and ask the committee to show up early to check everything is working. Have one of more backups including a phone based conference call.

**Call manager should not be the person defending:** Have someone else, ideally a committee member, set up and manage the Zoom (or other system) call. This means that the student doesn't need to deal with that on top of everything else and can focus on the defense.

**Mute everyone for the presentation:** Either ask all participants to mute themselves at the start or (better yet) have whoever is managing the call mute them all centrally. It's easy for the audience to forget they aren't muted and accidentally interrupt the presentation.

**Audience, show you engagement:** Leave your video on (unless bandwidth is an issue). If you've ever given a remote talk the lack of normal audience engagement is really challenging. A bunch of live video faces really helps. Also, consider exaggerating your positive responses. With lots of folks everyone is small so clear head nods, thumbs ups, and big smiles can all help mimic normal positive audience feedback.

**Use a multi-monitor setup:** Having two monitors will let you see folks attending the talk plus your slides and notes. Of course if it's easier for you to not see the audience, then definitely take the opportunity of defending remotely to not have to see them. You'll need to setup zoom to work with dual monitors for this to work properly [https://support.zoom.us/hc/en-us/articles/201362583-Using-Dual-Monitors-with-the-Zoom-Desktop-Client](https://support.zoom.us/hc/en-us/articles/201362583-Using-Dual-Monitors-with-the-Zoom-Desktop-Client) Alternatively you can share your screen from one computer and join the call from another computer to see all the participants.

**Manage bandwidth and adjust accordingly:** Test streaming quality in advance in the same place and time of day you’ll be defending. If viewers notice bandwidth issues (blurry or dropping frames) try moving the laptop closer to the WiFi router or plugging directly into the router or a wired Ethernet port. If there are still bandwidth issues you may want to have the audience stop their video. Since the presenter often can't tell if there are connection issues the person managing the call should either ask viewers to turn off their video via chat or turn off video centrally to avoid interrupting the presenter if possible.
Mimic "step out of the room": The committee should have a plan for having the student "step out of the room. In Zoom this can be done by using a breakout room for the committee to talk and then return to the main room when done (which is made possible by having a committee member manage the Zoom call). You can also put the defending student "on hold" https://support.zoom.us/hc/en-us/articles/201362813-Attendee-On-Hold

Committee members should use video: Committee members should definitely use video if possible during the private portion of the defense. This is an inherently stressful activity and a lot of the usual positive encouraging social cues get lost with voice only communication. That said, if you're freezing when asking questions it's probably because of your local wireless/upload bandwidth and so you can probably help this by turning off your video so that you can communicate clearly.

Committee members should be kind and supportive: Frankly you should always be doing this, but it's even more important now because everyone is under a ton of extra stress. This doesn't mean you can't probe the work, just do it in a positive way focused on helping the student. Also, consider minimizing required changes for the thesis. Most of us aren't focusing well right now and revisions are often due on a tight timeline. Clearly distinguish recommendations for changes prior to submitting papers from changes required for the thesis.

Communicate excitement about a student passing clearly/effusively: This is a big deal even if you’re stressed and can't celebrate it in the usual ways. Make really clear how big a deal this is to try to overcome the different feel of a video interaction vs. an in person congratulations.

Celebrate: New MS/PhDs - This may not be how you envisioned the conclusion of years work happening, but that doesn't change that it's a huge accomplishment. Celebrate in whatever (publicly responsible) way you can. One option is a video-based celebration. They're surprisingly fun!

This document is based on a Twitter thread by Ethan White (Tips for an effective remote defensehttps://twitter.com/ethanwhite/status/1240336385896316928) with ideas contributed to that thread by @echoechoR, @JosephLo16, @michaelhoffman, @kimpy79, and @ellelnutter. This document is released under the CC0 publication domain declaration (https://creativecommons.org/share-your-work/public-domain/cc0/) so that you can share and modify without restriction or need to provide credit. Thanks to @adanianscience for motivating me to put it up in formats useful for folks not on Twitter.