

Virtual/Hybrid Events

- [ICERM's Best Practices for Virtual Events](#)
- [Virtual Collaboration Tools](#)
- [Zoom Video Conferencing](#)
- [Virtual Workshop Session Formats](#)
- [AV Systems](#)
- [Hybrid Event Tech Options](#)

ICERM's Best Practices for Virtual Events

What follows is a list of best practices for hosting virtual events based on lessons ICERM has learned from our experiences. These points may seem obvious to some, and indeed, they follow ICERM's general operating philosophy. However, we list them here in the interest of furthering the broader discussion of facilitating continued research in a virtual environment.

Keep It Simple

This is perhaps the most important principle, and it overlaps a lot of areas. Remember that not everyone has the same level of technical knowledge and confidence. When choosing a conferencing application, make sure the interfaces, at least for the basic options, are intuitive and user friendly. Application client downloads should be easy to access. Installs and configurations should require minimal effort on the part of the user.

We also strongly recommend, where possible, choosing tools that are platform agnostic, widely accessible, and require minimal hardware. Any one of these could hinder a user's ability to participate.

The logistics of participation should be simple as well. For example When hosting multiple sessions within a single event, a shared link for all sessions is recommended if possible to reduce confusion.

Where security is concerned, consider carefully how much you really need, and don't secure beyond that. Registrations and passwords add complexity to the user experience and may make more hassle than some are willing to endure to participate. We realize this won't be a popular idea among security minded IT people. The balance between security and usability needs to be adjusted carefully, especially when the goal is broad accessibility for a large set of users with unknown or poorly defined operating parameters.

Practice

Ideally, the support staff should be experts with the tools being used. Anyone with an active role, such as session chairs, panelists, speakers, should be given an opportunity to familiarize themselves with additional functions they may need to use before the actual event. For example, our team provides speakers with an opportunity to schedule practice time in order to try out screen sharing functions and the like the week before an event. Unusual transitions or special functionality

should be mapped out and tested ahead of time.

Organization

Session chairs have proven to be a vital part of the logistics of our virtual events, particularly when running events that have multiple talks in a session. Chair duties are similar to in-person workshops, including speaker introductions, moderating the audience for questions, and keeping the session generally on schedule. Ideal chairs will have some knowledge of the scientific topics being discussed.

Support

ICERM has a team member actively monitoring, but not participating in all virtual events. This person is primarily there to help if there are technical issues, but also serves as another check on chat logs to make sure there isn't an overly large backlog of unanswered questions, and to assist with things like speaker transitions and breakout rooms. Generally this person serves as "meeting host" from a technical standpoint, and has full control of the application used for the event.

Communicate

This is perhaps as important as simplicity. Communicating early and often allows clear expectations to be set for everyone involved. Open dialogs as early as possible with anyone in an active role. Make sure they understand what it is they're expected to do and when. Ensure that everyone understands what your tools will and won't do. Provide links to documentation and how-to guides as well as any necessary software downloads.

Be Flexible

Virtual events introduce a wide variety of factors that are outside the control of the host. Internet connections drop or are bogged down. Pets and people make surprise appearances. Hardware breaks or is suddenly inaccessible. Have a contingency plan, such as a stand in speaker, or a backup QA session. We also recommend having multiple means of contact for speakers and panelists (i.e. email and phone) in case they are unexpectedly absent.

Virtual Collaboration Tools

ICERM's IT staff supports a wide variety of virtual collaboration tools, software, and platforms. We encourage organizers to contact IT staff before your workshop in order to assure we are ready to support your virtual events. **An ICERM IT staff member will be on all official ICERM Zoom events to provide assistance and technical support.**

Zoom Video Conferencing

ICERM uses Zoom as our primary video conferencing service. Workshop events normally use Zoom Meetings, but we occasionally use Zoom's add-on Zoom Webinars feature for more formal virtual events like public lectures. A short comparison of Meetings and Webinars is below. See the Zoom Introduction for more details and a full technical comparison.

Zoom Virtual Meetings

Zoom Meetings provides meetings with video, audio and screen sharing for up to 300 real time participants.

- ICERM uses Zoom Meetings for most workshop talks, discussion sessions, working group meetings, and virtual social events such as coffee break sessions and workshop receptions.
- Zoom Meetings allow all participants to control their own microphones, cameras, and screen sharing so they can see, chat, and collaborate with each other.
- For officially scheduled workshop events, ICERM's IT staff creates the Zoom sessions and shares the links with all participants.
- During long-term programs, ICERM can support a limited number of recurring working group meetings on Zoom.
- **All attendees, speakers, and session chairs are encouraged to review our Zoom Meetings Guide.**

Zoom Webinar

Zoom Webinar is an add-on to the Zoom Meetings service that allows more formal webinar broadcasting and live-streaming outside of Zoom.

- ICERM sometimes uses Webinar for more formal events such as virtual public lectures.
- Webinar attendees will be in view-only mode but can still raise their hand to request microphone access or use chat to ask questions.

- Most ICERM Webinars are live-streamed on the icerm.brown.edu website via Panopto.

Email/Text Chat Platforms

Slack

[Slack](#) is an app and web based communication platform designed loosely around the classic Internet Relay Chat (IRC) model.

- Slack divides chat up into “channels” for topic-based discussion.
- Slack's app is available for all major platforms. A browser-based client is also available.
- Free Slack workspaces retain the last 10,000 messages for a searchable history and also provide 1-to-1 video calling.
- Paid Slack workspaces can support group video calling up to 15 people.

Technical Needs/Constraints

- Program organizers who wish to use a Slack workspace for their program should request Slack setup from ICERM IT staff at least two weeks before the start of an event.
- For group-based events, ICERM staff can pre-create and populate channels on Slack if we are provided a list of groups and participants one week before the start of the program.

Listserv

Long-term programs (Semester Programs and Summer@ICERM) are provided with a program mailing list via Brown's central listserv. All participants are members of the list and can use it to send email announcements to the other members of their program. Listserv is not available for short-term programs.

Web-based Collaboration

Overleaf

[Overleaf](#) is an online collaborative LaTeX editor.

- Overleaf provides an online collaborative Google Docs-style editor for creating LaTeX documents. Several collaborators can work together on the same document making edits and suggestions/comments.
- Overleaf is available to all postdocs and Brown university students via Shibboleth login.
- ICERM can also support premium Overleaf projects for other workshop groups on a case-by-case basis. Organizers should contact IT staff to discuss this option.

Technical Needs/Constraints

- Organizers who wish to use Overleaf for their workshop should discuss this with ICERM IT staff at least two weeks before the workshop.

JupyterHub

[JupyterHub](#) is a collaborative, online, multi-user version of the popular Jupyter Notebook software.

- Brown CCV hosts a [JupyterHub server](#) that can be made available on request to specific working groups.

Technical Needs/Constraints

- Advance notice is required for this service. Organizers should contact IT staff to discuss this option at least two weeks before the start of the workshop.

Zoom Video Conferencing

Zoom is the official video conferencing service of ICERM and Brown University. ICERM uses both Zoom Meetings and Zoom Webinar for our events.

[Overview of Zoom at ICERM](#)

[Zoom Meetings Guide](#)

[Zoom Webinars Guide](#)

Virtual Workshop Session Formats

Standard Lecture Talk

A standard lecture talk by a presenter delivered via Zoom. Usually scheduled for 45 minutes plus 15 minutes Q&A.

Technical Needs/Constraints

- Software: Zoom Meeting.
- Sessions can be recorded and posted afterwards to our video archive via Panopto.
- One IT staff will be the Zoom host and provide technical support.
- A session chair should be named to introduce the speaker and moderate questions. The session chair will also be made co-host of the Zoom meeting.
- All sessions should have at least one Zoom host and two co-hosts in case of connectivity issues. An organizer normally will serve as this backup co-host and session chair.

Lightning Talks

A series of short 5 to 10 minute “lightning” talks hosted back-to-back, usually presented by early-career researchers and graduate students. Each presenter is typically limited to two slides.

Technical Needs/Constraints

- Software: Zoom Meeting.
- Sessions are not normally recorded or archived.
- Slides must be sent to ICERM program staff no later than 24 hours before the lightning session.
- ICERM staff stacks all slides together into a single file to ease transitions between the lightning speakers. The ICERM staff member functioning as Zoom host will screen share the slides and advance them on cue from each presenter.
- One IT staff will be the Zoom host and provide technical support.
- A session chair should be named to introduce each lightning presenter, moderate questions, and keep the session on time. The session chair will also be made co-host of the Zoom meeting.

- All sessions should have at least one Zoom host and two co-hosts in case of connectivity issues. An organizer normally will serve as this backup co-host and session chair.

Panel Discussion

A discussion and question/answer session led by several panelists. Panel discussions sometimes have one or two moderators as well.

Technical Needs/Constraints

- Software: Zoom Meeting.
- Sessions can be recorded and posted afterwards to our video archive via Panopto.
- One IT staff will be the Zoom host and provide technical support.
- A session chair should be named to introduce the speaker and moderate questions. The session chair will also be made co-host of the Zoom meeting. In a panel discussion, this role is usually filled by the moderator(s).
- All sessions should have at least one Zoom host and two co-hosts in case of connectivity issues. In a panel discussion session, this could be the second moderator or one of the panelists.

Poster Gallery

A virtual poster gallery on the event web page.

Technical Needs/Constraints

- ICERM staff needs all posters by 9am three business days before the workshop.
- Posters should be submitted as a PDF.

“Make Your Own Coffee” Hour

An informal social discussion session for workshop attendees to meet and mingle with each other virtually.

Technical Needs/Constraints

- Zoom Meeting or spatial.chat

- When using Zoom meetings, breakout rooms can be used to facilitate smaller social groups.
- When using Zoom, one ICERM staff member will be the Zoom host to provide technical support and facilitate breakout rooms.
- These can be scheduled as a stand-alone session or between other sessions, but we find stand-alone sessions have better attendance.

Problem Sessions and Discussion Sessions

Session for attendees to gather either in the full group or smaller breakout groups and discuss topics or problems related to the research area of the workshop.

Technical Needs/Constraints

- Software: Zoom Meeting.
- Zoom breakout rooms can be used to split the large group into smaller groups to better accommodate participation from all attendees.
- Sessions are not normally recorded or archived.
- One IT staff will be the Zoom host and provide technical support.
- A session chair or discussion leader should be named moderate the session. The session chair will also be made co-host of the Zoom meeting.
- All sessions should have at least one Zoom host and two co-hosts in case of connectivity issues. An organizer normally will serve as this backup co-host and session chair.

Project/Group Work Sessions

Small working group sessions during project-based or group-based workshops. These sessions are usually ongoing throughout the week of the workshop.

Technical Needs/Constraints

- These sessions are typically organized and hosted by group leaders.
- Due to constraints with ICERM's Zoom licensing, group leaders are normally asked to host the video conferencing rooms for their individual groups if possible.
- ICERM can support Zoom rooms for a small number of groups if nobody in a group has access to video conferencing software.

AV Systems

Various rooms/systems available:

10th Floor Classroom

11th Floor Conference Room

11th Floor Lecture Hall

Hybrid Event Tech Options

ICERM is able to support three distinct levels of hybrid events in the lecture hall:

Fully In Person

All speakers and registered participants attend in person and are present in the room. Talks are live-streamed for remote viewing via ICERM's website in accordance with the Live Streaming Policy. Remote viewers have no direct means of interaction with those in the lecture hall.

Hybrid using Zoom Webinar

Some speakers and participants are remote. All registered participants will be given a link to the webinar. Only the speaker and session chair, will have the ability to control their video and microphone. Other Participants may interact by text in Zoom's chat function or by requesting permission to turn on their microphone from the session chair. Live streaming will also be active, as in option 1. Note that this option requires a high level of moderation on the part of the session chair.

Hybrid using Zoom Meetings

Some speakers and participants are remote. All registered participants will be given a link to the meeting. By default, all participants have the ability to be visible via video and can use their microphones to interact with the speaker and those in the lecture hall. Remote participants who have their cameras enabled are visible to the speaker on a monitor at the back of the room. Live streaming will also be active as in option 1. This option still requires some active moderation on the part of the session chair.