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.

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. A member of ICERM's IT staff also monitors the Zoom session to provide any technical support should the need arise.
- 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.

Zoom Technical Needs/Constraints

- An ICERM IT staff member will be on all official ICERM Zoom workshop events to provide assistance and technical support.

Other Video Conferencing Platforms

Gather

Gather is a web-based virtual space that combines a 2D virtual space with video chat, allowing users to move around the virtual space and interact with others in small groups.

- Users in Gather are represented as a 2D game-style avatar within a virtual world. The standard Gather world has a virtual conference center along with an outdoor area.
- Users can move their avatars around the space and congregate in groups to have group discussions, allowing more free-form small group discussions than Zoom Breakout rooms.
- ICERM has been using Gather for recent coffee breaks and other social events.

Technical Needs/Constraints

- Organizers should let ICERM IT staff know if they would like to use Gather for any social events at least a week before their event.
- An ICERM staff member will join most Gather sessions to answer any participant questions.

spatial.chat

spatial.chat is a web-based "virtual party" for up to 50 guests.

- Users in spatial.chat are represented as bubbles within the virtual space.
- Users can move their bubbles around the space and congregate in groups to have group discussions, allowing more free-form small group discussions than Zoom Breakout rooms.
- ICERM has used spatial.chat for some coffee breaks and other social events, but recently we have been using Gather more than spatial.chat for better compatibility and more features.
- spatial.chat is currently free for up to 4 people and a paid service for larger groups.

Technical Needs/Constraints

- An ICERM staff member will join most spatial.chat sessions to answer any participant questions.
- Currently, we encourage organizers to evaluate and consider using Gather rather than spatial.chat.

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.

Zulip

[Zulip](#) is an open-source web-based communication platform similar to Slack.

- Zulip divides chat up into "streams" (similar to Slack's channels). Streams also have topics to further organize the discussion.
- Zulip also has apps for all major platforms in addition to a browser-based web client.
- For ICERM users, Zulip has several benefits over a free Slack workspace:

1. Zulip has better Latex integration than Slack.
2. Zulip topics provide an additional level of organization within streams, which can be beneficial during virtual workshops.
3. Zulip retains the full discussion history. It is hidden for free tiers, but can be viewed by upgrading to the paid tier.

Technical Needs/Constraints

- Program organizers who wish to use a Zulip workspace for their program should request Zulip setup from ICERM IT staff at least two weeks before the start of the program.
- For group-based events, ICERM staff can pre-create and populate groups on Zulip 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

Discussion Board

ICERM's discussion board ([discuss.icerm.brown.edu](#)) is a more traditional discussion board/forum powered by [Vanilla Forums](#).

- The discussion board is a fully web based platform where participants can create threads and post comments.
- Access to the discussion board is available on request for group and project based research

programs in addition to long-term programs.
- Participants can retain access to the discussion board after their program ends, making it a good option for groups who wish to continue their research collaborations after leaving ICERM.

Technical Needs/Constraints

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

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.