

# A Hybrid Meeting System for LCTG Meetings

[https://docs.google.com/document/d/1wp2spcFi3OzDNuLPbcUBp\\_IQ1yi14eHBYWr67-DXewE/edit](https://docs.google.com/document/d/1wp2spcFi3OzDNuLPbcUBp_IQ1yi14eHBYWr67-DXewE/edit)

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## Introduction

The weekly LCTG meetings are primarily talks by a member or guest speaker about a variety of topics in the Science, Math, Computer, and Medical fields. The speaker is typically introduced by the host of the meeting. Speakers come with presentations in electronic form, which they show from a laptop connected to a video display or projector television and audio system in the meeting room.

## Terminology

- **Zoom** is an Internet conferencing system that provides global audio, video and presentation communications between the participants of a meeting.
- The **Presenter** is the person delivering the talk to the group.
- The **Audience** is the combination of the **local** people present in the meeting room and people who are **remote** from the meeting using **Zoom** to access the meeting.
- The **Meeting Computer (MComp)** is used to host devices and services used by everybody in the meeting. Examples of devices are microphones and cameras. Examples of services are the Zoom conference display that is shown on the meeting room video projector.
- The **Audio/Video (A/V)** system is the audio/video system in the meeting room which uses the installed room speakers and large video display.

- The **Handheld Microphone (HMic)** is used by local participants to ask questions of the presenter. All questions must be asked through the **HMic** so that remote participants can hear questions.
- The **Lavalier Microphone (LMic)** is a Lavalier microphone used to capture the presenter's voice so that remote participants can hear the presentation.
- The **Audience Camera (ACam)** is positioned at a high elevation in the meeting room so that it can capture the view of the local participants in the meeting room.

## Basic Ideas

In the future, with the addition of hybrid access support for the meeting, we expect a range of 20 to 40 people to attend our meetings. These people will be split between a local audience in the meeting room and a remote audience attending using Zoom from all over the town, state, country, and even world.

The size of the local and remote audiences will vary depending on the weather, time of year, and topic of the presentation. The people in the conference room will sit at tables arranged in four to eight rows, four people per row as shown below.



Meeting Room

A very uniform and manageable way to run these meetings is to have everybody (the presenter, the local and remote participants, and the host) all use Zoom as a shell for the presentation, audience interactions, and meeting management.

A couple of observations:

1. The **MComp** is a laptop which is used for several purposes:
  1. The **MComp** is a member of the **Zoom** conference and connected to the **A/V** system in the room so that local participants can see the speaker's presentation on the display screen and hear the audio of remote participants who may have questions.
  2. The **HHMic** is connected to the **MComp** and is used by the local participants in the meeting room to ask questions of the presenter, whether the presenter is local or remote.
  3. The **ACam** is also connected to the **MComp**. Through the **HHMic** and **ACam**, the **MComp** picks up the audio and video of people in the room who ask questions of the presenter. The **MHost** should moderate questions from people who either raise their hand on Zoom or in the meeting room.
2. Whether they are in the meeting room or at a remote location, there is no difference in what a **Presenter** needs to do to give their talk. For either situation the presenter needs to do the following things:
  1. Make sure that their laptop is loaded with their presentation and the latest version of Zoom:
  2. Before the start of the meeting, they need to join the Zoom meeting.
  3. They are granted permission to share their screen by the **MHost**.

3. Local members of the **audience** in the meeting room can hear and see the presentation as they normally do. If they want, they can bring their laptop and join the meeting but must either mute their speaker or listen with headphones. To ask questions they must be handed the **HHMic** before they can ask their question.

With those considerations, the previous diagram of the meeting room is augmented with the various devices in the figure below.



Hybrid Meeting Room

# Documents about LCTG Hybrid Meeting System

1. A Hybrid Meeting System for LCTG Meetings  
[https://docs.google.com/document/d/1wp2spcFi3OzDNuLPbcUBp\\_IQ1yi14eHBYWr67-DXewE/edit](https://docs.google.com/document/d/1wp2spcFi3OzDNuLPbcUBp_IQ1yi14eHBYWr67-DXewE/edit)
2. Technical Description of A Hybrid Meeting System for LCTG Meetings  
<https://docs.google.com/document/d/1Ozw4ToJW1GpOvOP-vv98qMxz69i4zp0Oe1asT6GvtE/edit>
3. List of Equipment and Specific Tests for A Hybrid Meeting System for LCTG Meetings  
[https://docs.google.com/document/d/1YoXAC\\_HpMVE-XXIxm\\_Er6HWE0du5-4\\_PkcRvKnBCgm0/edit](https://docs.google.com/document/d/1YoXAC_HpMVE-XXIxm_Er6HWE0du5-4_PkcRvKnBCgm0/edit)
4. Participants' Guide to A Hybrid Meeting System for LCTG Meetings  
[https://docs.google.com/document/d/1D2a\\_hRK8R\\_nV280o22R-neG7zDFpnH86kzPj3Y4X8jE/edit](https://docs.google.com/document/d/1D2a_hRK8R_nV280o22R-neG7zDFpnH86kzPj3Y4X8jE/edit)
5. Plan for Testing A Hybrid Meeting System for LCTG Meetings  
[https://docs.google.com/document/d/1HzpXk3upbBoLmFHcg-6diXVansCa68oH5iRVNCq\\_o2o/edit](https://docs.google.com/document/d/1HzpXk3upbBoLmFHcg-6diXVansCa68oH5iRVNCq_o2o/edit)
6. Consensus Designs for Hybrid Meeting Systems  
[https://docs.google.com/document/d/18t2sOdtJRWXnZbRI\\_HMr\\_5BKDHbgc74\\_fMjslPKGf54/edit](https://docs.google.com/document/d/18t2sOdtJRWXnZbRI_HMr_5BKDHbgc74_fMjslPKGf54/edit)