



The Abdus Salam  
**International Centre  
for Theoretical Physics**



# Self-managed Video Conferencing services for the ICTP community

July 7, 2020

# Outline

1. Video Conferencing features overview: basic, advanced;
2. **Nextcloud Talk** as secure private small tool;
3. **Google Meet** as a larger tool;
4. **Other VC tools** short overview;
5. **Best practices**;
6. Q & A session.



# What is Covered

## Tools supported by ICTS

- **Nextcloud Talk** on [dbox.ictp.it](https://dbox.ictp.it) (via ICTP account, all users enabled)
- **Google Meet** (via ICTP account, not all users enabled)
  
- How to set-up and manage a VC meeting;
- VC with ICTP colleagues, VC with external collaborators;



# Disclaimer

As the situation with VC tools is rapidly evolving, a lot of information in this presentation might soon be outdated (time limitations, new features). Verify with each tool what's new.

**ICTS** is supporting **NextCloud Talk** and **Google Meet**.

All other tools are valid but are to be used on a **self-service** base.

**Zoom** is and remains the main ICTP VC tool, for stability and features.



# About Zoom, managed by ICTS Video Team

The ICTP has dozens of **licenses** for Zoom which allow for meetings and webinars with various numbers of participants.

Zoom is the main platform adopted by **ICTP for conferences and official meetings/webinars.**

The events have to be created and managed by the **ICTS Video Team.**

For **smaller** meetings, other tools are preferable.



# Advantages of Self-managed VC services

- Often there is **no** need to **register** with the service (use ICTP account credentials instead)
- **Ease** of use:
  - create a talk/room/meeting/VC call (get URL);
  - share URL (e.g. via mail);
  - start talking.
- **Security** (if hosted at ICTP premises)
- **No** need for booking with specialised **ICTS** personnel



# Features in a Video Conferencing Tool

- **Who** has access?
- **Time** unlimited?
- Limit to **number** of participants?
- **Audio/Video/Screen Sharing**
- (Written) **Chat**
- Different layouts for screen (grid view)

## Advanced:

- **Waiting room**
- Participants management (mute all)
- Whiteboard/Screen-sharing with Annotations
- File transfers
- **Recording**
- Captions (audio to text), Transcriber
- **Integration** with other tools (calendars, Slack, etc.)
- Screen remote control
- Virtual background
- Streaming

# Nextcloud Talk



Nextcloud (which is installed on <https://dbox.ictp.it/>) offers the app **Talk**.

Real-time **communication** and **collaboration** in a file sync & share environment

For **small** meetings: works for up to **4-5** people.

**All ICTP users** have access to this facility.

It's easy to find other ICTP users. Quick chat with ANY ICTP colleague!

**Secure** and **confidential**: the server is **inside** the ICTP.

**No** built-in ability to centrally **record** the meeting





# Demo: Nextcloud Talk

The image displays a Nextcloud Talk video conference interface. On the left, a grid of video thumbnails shows participants Johannes, Maria, and Massimo. The main view features a large video of Maffione Massimo. A chat window on the right, titled 'project meeting', shows a log of events: Johannes starting the call at 3:28 PM, Massimo joining at 3:29 PM, the user joining at 3:30 PM, and Maria Verina joining at 3:30 PM. A file named 'Project1-report.md' is shared in the chat. The browser address bar shows the URL 'dbox.ictp.it/nextcloud/index.php/call/47x6jqq'.

# Features Overview for Nextcloud Talk

- **Who** has access? **ALL ICTP**
- **Time** unlimited? ✓
- Limit to **number** of participants?  
~5
- **Audio/Video/Screen Sharing**: ✓
- (Written) **Chat**: ✓
- Different layouts for screen (grid view): ✓

## Advanced:

- Waiting room: ✓
- Participants management (mute all): ✓
- Whiteboard/Screen-sharing with Annotations: ✗
- File transfers: ✓
- Recording: ✗
- Captions (audio to text): ✗
- Integration with other tools (calendars, Slack, etc.): ✗ \*
- Screen remote control: ✗
- Virtual background: ✗
- Streaming: ✗

\* Deep integration with other apps in the Nextcloud Hub (File sharing, Contacts etc.)

# Google Meet



Google Meet can be set-up by everyone who has a Google account.

ICTP has access to **G Suite Education Edition**, including Meet and Calendar

Many ICTP users (Staff, etc.) are already enabled with their credentials.

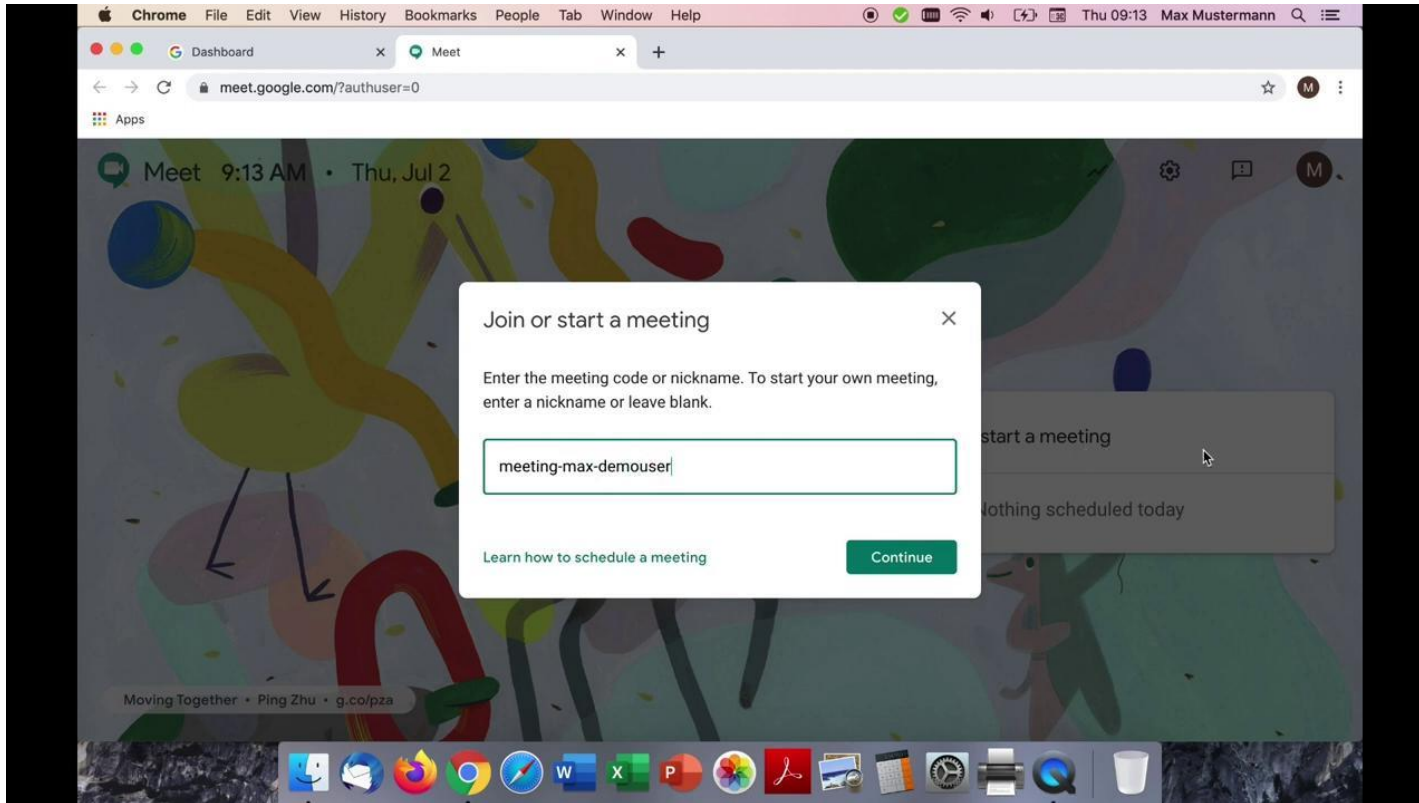
<https://meet.google.com/>

Provide your ICTP username in the form (**username@ictp.it**) as login name.

For larger meetings (up to **250** participants; until September 30, 2020, after up to **100**).

Has built-in **recording** to drive.

# Demo: Google Meet



# Features Overview for Google Meet

- **Who** has access? **ICTP Staff**
- **Time** unlimited? ✓
- Limit to **number** of participants?  
250 through September 30, 2020,  
after:100
- **Audio/Video/Screen Sharing:** ✓
- (Written) **Chat:** ✓
- Different layouts for screen (grid view): ✓

## Advanced:

- Waiting room: ✓
- Participants management (mute all): ✓
- Whiteboard/Screen-sharing with Annotations: ✗
- File transfers: ✓
- Recording: (✓ **free until 30/09/2020**) (**on organizer's drive**)
- Streaming: ( ✓ **free until 30/09/2020**)
- Captions (audio to text): ✓
- Integration with other tools (calendar, Slack, etc.): ✓
- Screen remote control: ✗
- Virtual background: ✓ (**browser extension**)

# Some Other Video Conferencing Tools

You can sign up to and use the following services for free.

Note that the **ICTS does not provide any user support!**

- **Zoom** (via **free** account, 40 minutes)
- Cisco **Webex** (via free account, 50 minutes limit)
- **Whereby.com** (via free account with limitations: 4 participants)
- lorestoacasa.work (**Multiparty Meeting**/Edumeeet, **Jitsi**) (free, no sign up, 50 participants)
- ...



# Zoom.us

The screenshot displays the Zoom.us website interface during the account setup process. At the top, a dark navigation bar contains links for 'REQUEST A DEMO', '1.888.799.9666', 'RESOURCES', and 'SUPPORT'. Below this, a white navigation bar features the Zoom logo, 'SOLUTIONS', 'PLANS & PRICING', 'CONTACT SALES', and 'SCHEDULE A MEETING', 'JOIN A MEETING', 'HOST A MEETING'. The main content area shows a progress indicator with three steps: '1 Account Info', '2 Invite Colleagues', and '3 Test Meeting'. On the left, a hand holds a tablet displaying the Zoom mobile app interface. On the right, a white card titled 'Don't Zoom Alone.' prompts the user to invite colleagues. It includes three input fields, each containing 'name@domain.com', and a link to 'Add another email'. A checkbox labeled 'I'm not a robot' is present, with a CAPTCHA icon and 'NCAPTCHA Privacy - Terms' text. At the bottom of the card are two buttons: 'Invite' (orange) and 'Skip this step' (white).

# Webex.com

Via free account;

50 minutes time limit;

Large professional tool;

Via Web, via dedicated app;

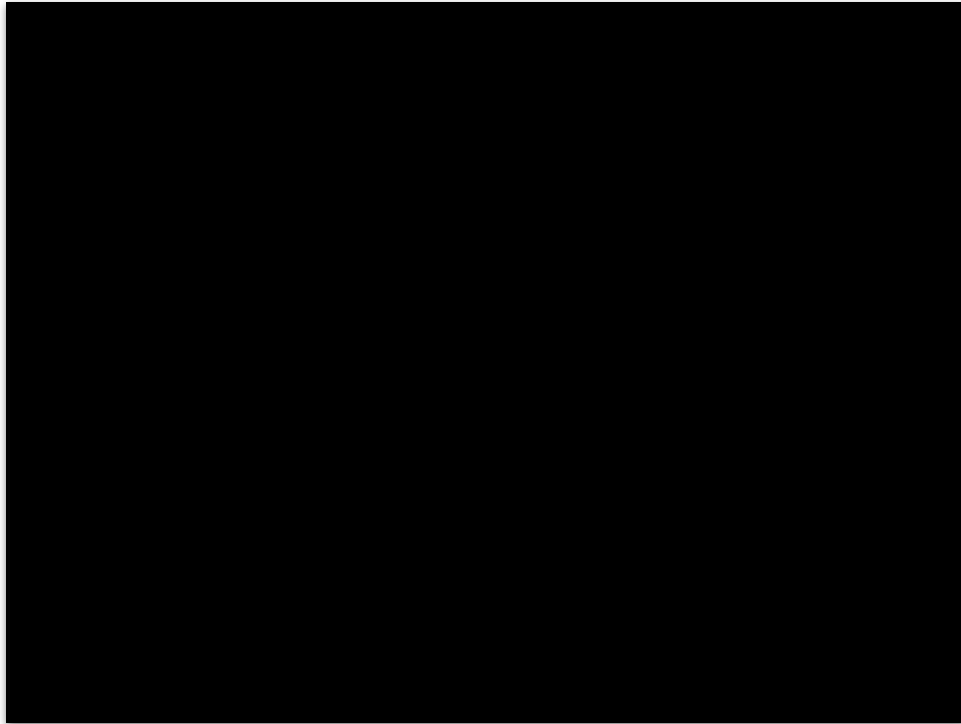
<https://help.webex.com/it-it/8bzter/Cisco-Webex-Meetings-Video-Tutorials>

advanced features are not free;





# Whereby.com



# lorestoacasa.work

- The system is free, it doesn't require to sign up;
- Up to 50 participants per meeting;
- Made by Community (more than 40 servers), it offers two platforms:
  - Multiparty Meeting/Edumeet;
  - Jitsi (it has similar aspect but requires more bandwidth).



# lorestoacasa.work



iorestocasa

Homepage

Server

Come si usa?

Voglio contribuire!

F.A.Q

Rassegna stampa

Contatti

Crediti

Privacy

#smartworking

#isolatimanonsoli

#smartlearning

#hopeaftercovid

14:29

giovedì 2 luglio

## iorestocasa.work

71 Utenti connessi • 45 Server disponibili

**Videochiamate di gruppo, libere, private e gratuite**, messe a disposizione da **volontari** per continuare a studiare, lavorare, socializzare in questo periodo di emergenza!

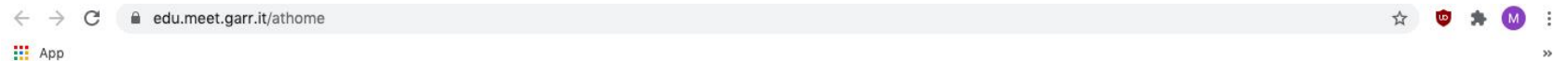
Scrivi un nome

INIZIA

Made with ❤️ in Fabriano



# lorestoacasa.work



The image shows a meeting entry screen for 'GARR EduMeet'. At the top left, there are logos for 'Consortium GARR' and 'eduMEET'. To the right is a profile icon. Below the logos, the text 'GARR EduMeet' is displayed. A horizontal line separates the header from the main content. The main content includes the text 'Stai per entrare in un meeting' followed by 'ID stanza: athome'. Below this, it says 'Imposta il tuo nome per la partecipazione, e scegli in che modo vuoi entrare:'. There is a text input field with the placeholder 'Il tuo nome' and a vertical cursor. At the bottom right, there are two buttons: 'SOLO AUDIO' and 'AUDIO E VIDEO'.

# lorestoacasa.work

edu.meet.garr.it/athome

App

Consortium GARR | eduMEET GARR EduMeet

ESCI

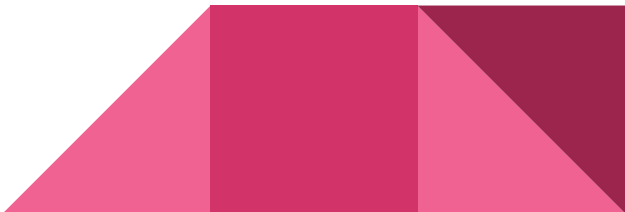
Massimo

# lorestoacasa.work

The screenshot displays a web browser window with the address bar showing `edu.meet.garr.it/athome`. The browser's address bar includes navigation icons (back, forward, refresh) and a search icon. Below the address bar, there are icons for an app, a star, a shield, a gear, and a profile icon labeled 'M'. The main content area features a dark blue header with the Consortium GARR logo, the eduMEET logo, and the text 'GARR EduMeet'. On the right side of the header, there are icons for settings, a full-screen icon, a notification icon with a '3' badge, a lock icon, a profile icon, and a red 'ESCI' button. The main area contains three video feeds of participants. The first feed on the left shows a man with grey hair, wearing a dark shirt, with the name 'Massimo' at the bottom. The second feed in the middle shows a woman with grey hair and glasses, wearing a blue and white patterned top, with the name 'Demouser' at the bottom. The third feed on the right shows a man with grey hair wearing a headset and a light-colored shirt, with the name 'Garr' at the bottom. The background of the video feeds is a blue and white abstract pattern.

# How to choose a Video Conferencing tool ?

- How many participants?
- From ICTP only?
- Confidentiality needed?
- Time duration?
- Territoriality censorship (embargo)?
- Recording needed?
- White board needed?
- Other advanced features needed?



# Best practices (1)

- Keep your software (web browsers or specific applications) **up to date**.
- Some tools work better with certain **browsers**.
- When experiencing problems, try to **leave** and re-enter the meeting; try changing web browser; try **rebooting** the computer
- If the dedicated application does not work, a web browser or your **smartphone** might do the job as well
- Video conferences are power hungry, so you can also expect the CPU **fan** to become noisy.
- When you copy the **invitation link**, be careful that it is **complete**, otherwise your invitee might end-up in an empty room!





# Best practices (2)

- Avoid "Zoom **Fatigue**", keep meetings short, give breaks
- Before **recording** a meeting, collect consent from all Presenters
- VIDEOMEETING: 10 TIPS FOR PERFECT VIDEOCONFERENCES:

The following three slides have been provided by GARR:

<https://garr.it/en/news-events/publications/informative-material/5101-tips-for-videconferences/file>



## BEFORE YOU START



# VIDEO MEETING

# 10

Tips for a perfect videoconference experience



### 1 GET PLUGGED IN

If you are using a mobile device (laptop, tablet or smartphone) connect to power: videoconference services need a lot of power and will quickly drain your battery!



### 2 HEADPHONES MAKE IT BETTER

Use headphones or earbuds, instead of the loudspeakers of your device. You'll avoid echo and make audio much better for everyone in the call



### 3 MIND (WHERE) YOU TALK

Use an external microphone or headphones with internal microphone. If you haven't one, move closer to the device microphone as you speak



### 4 BE IN THE SPOTLIGHT

Try not to have a strong light behind you (like a curtainless window). A front light is preferable for others to better see your face

## DURING THE VIDEOCONFERENCE



### 5 SILENCE IS GOLDEN

Mute your microphone when you are not speaking. Otherwise your background noise could distract, cause echo, or break the speaker's voice



### 6 TO EACH THEIR OWN (TURN)

If you want to speak, use the "raise your hand" function and wait for the host to give you the floor. This will avoid overlaps and keep the discussion orderly



### 7 SHARE (BUT NOT TOO MUCH)

Use the "share" button only when you want to show your screen to all participants. Always agree this beforehand with the host

## AND IF SOMETHING GOES WRONG...



- 8 CABLED IS BETTER**  
Connect to a wired port!  
Even if the connection is good, if radio channels are heavily used the Wi-Fi can become unstable and make your videoconference experience poor



- 9 IMAGE IS NOT EVERYTHING**  
If the audio is poor and makes it hard for you to talk or follow what the others say, try to stop your video and go audio-only: you'll save bandwidth and improve quality



- 10 CAN'T TALK? JUST CHAT!**  
Many videoconference applications have a chat function: use it to communicate with others in case of audio problems

Texts: GARR (C. Allocchio, M. Campanella), Nordunet (R. Buch, L.Fisher), SUNET (V. Nordh)  
Icon: priyanka from the Noun Project

# Summary / Conclusions

- Self-service/self-managed/Autonomous/**Easy** to use
  - **Quick** VC meeting with colleagues/collaborators
  - User managed Own "virtual office" where others walk-in to talk to you
- 
- Nextcloud **Talk**, with 2 to 5 persons, ANY ICTP user, inside ICTP
  - Google **Meet**, for bigger meetings, up to 250 through September 30, 2020, after up to 100
  - ICTP account credentials
- Other tools: free to explore
  - need to register
  - time limits
  - no ICTS support



# Help and more information

- For assistance, please contact the ICTS through [helpdesk@ictp.it](mailto:helpdesk@ictp.it)
- <https://nextcloud.com/talk/>
- <https://apps.google.com/meet/how-it-works/>

Others:

<https://support.zoom.us/hc/en-us/articles/206618765-Zoom-video-tutorials>

HOW TO Zoom playlist:

<https://www.youtube.com/playlist?list=PLKpRxBfeD1kEMI1Ild3NXI77fKDzSXe>

<https://help.webex.com/it-it/8bzter/Cisco-Webex-Meetings-Video-Tutorials>

<https://whereby.com>

<https://iorestoaCasa.work>

<https://edumeet.org/>

# Thank You!

Alessandro Cenni

Johannes Grassberger

Thomas Gurtner

Massimo Maffione

Sabrina Visintin

Maria Verina



# Q&A

Questions and Answers



# Bonus Slides





Search conversations or users



MM Mustermann Ma: You left the call

Create a new group conversation

Talk updates - Shared files are now ope... 19



**Join a conversation or start a new one**

Say hi to your friends and colleagues!

Talk - Nextcloud

dbox.ictp.it/nextcloud/index.php/apps/spreed/

Search conversations or users

MM Mustermann Max  
You left the call

Talk updates   
- Shared files are now ope... 19

me-and-max-and-external-collab

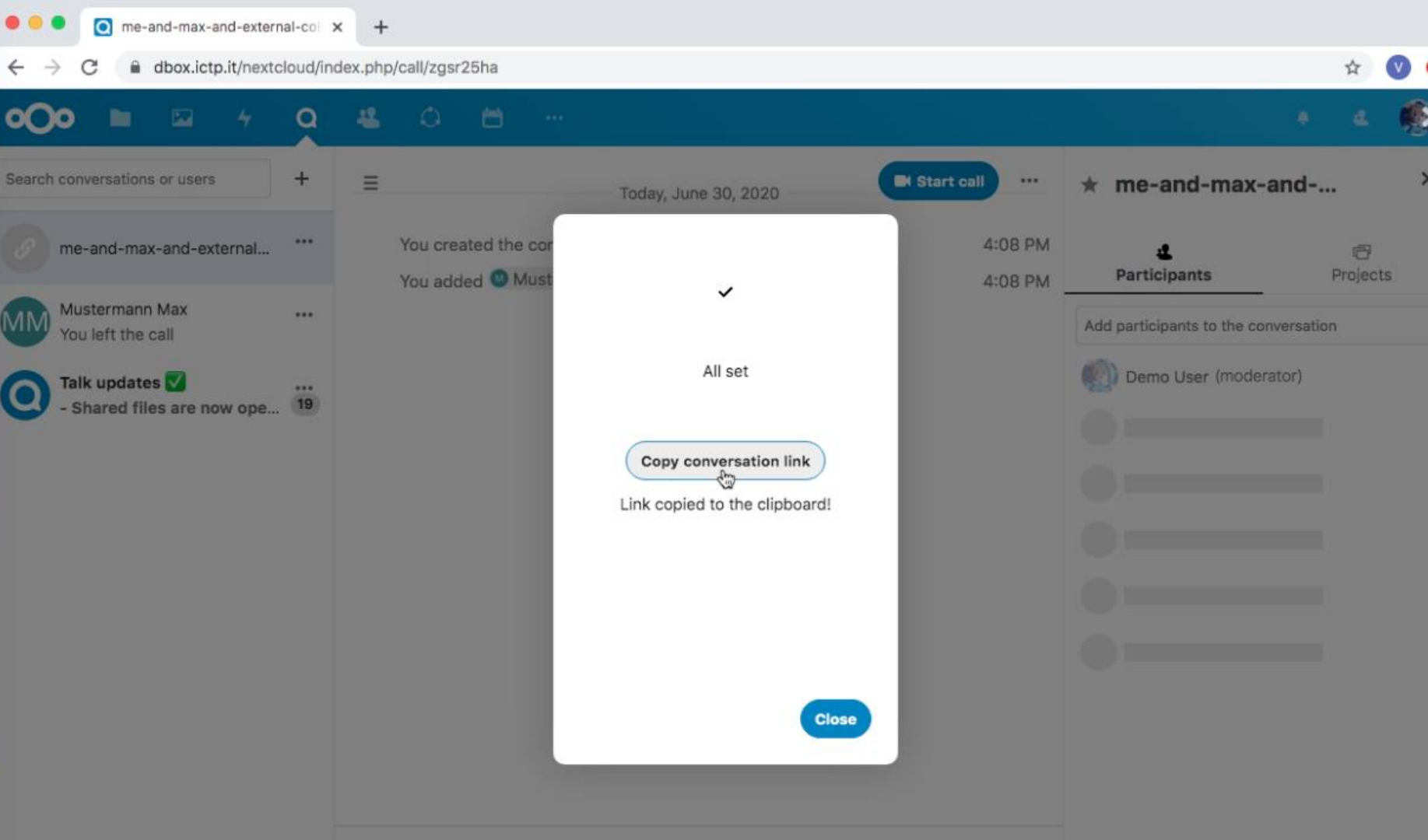
Allow guests to join via link

Password protect

Add participants

or start a new one

ds and colleagues!

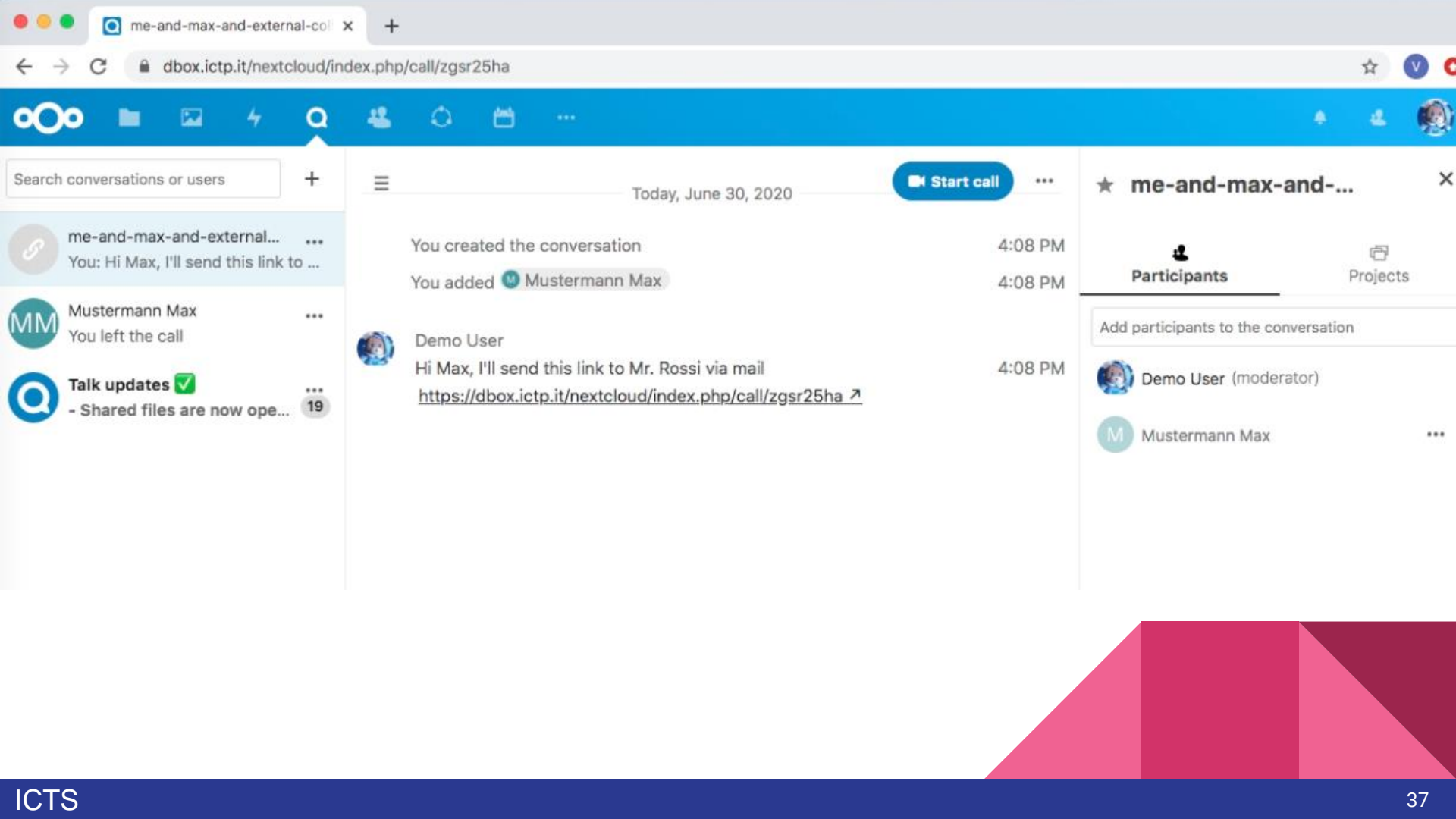


All set

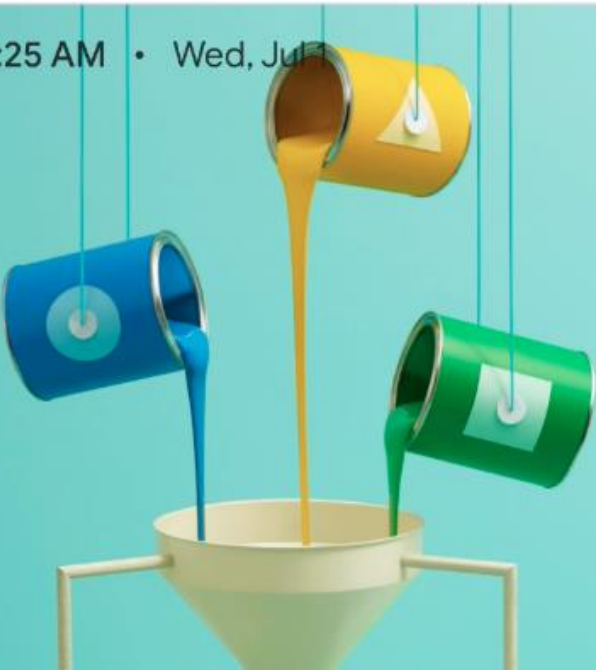
Copy conversation link

Link copied to the clipboard!

Close



Meet 12:25 AM • Wed, Jul 17



~ ⚙️ 💬 M

+ Join or start a meeting

Nothing scheduled today

meet.google.com wants to

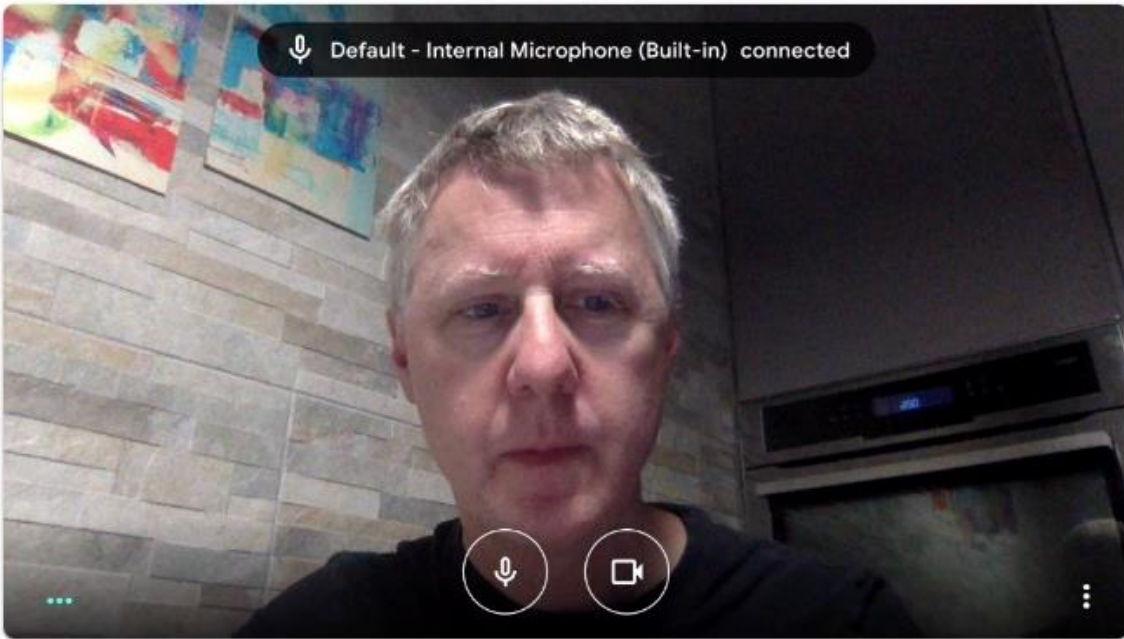
Show notifications

Block Allow

### Allow Meet to use your camera and microphone

Meet needs access to your camera and microphone so that other participants can see and hear you. Meet will ask you to confirm this decision on each browser and computer you use.

Dismiss



## Meeting ready

meet.google.com/mpg-kkxg-bqz

[Join now](#) [Present](#)

Other options

[Join and use a phone for audio](#)



## Add others



Share this info with people you want in the meeting

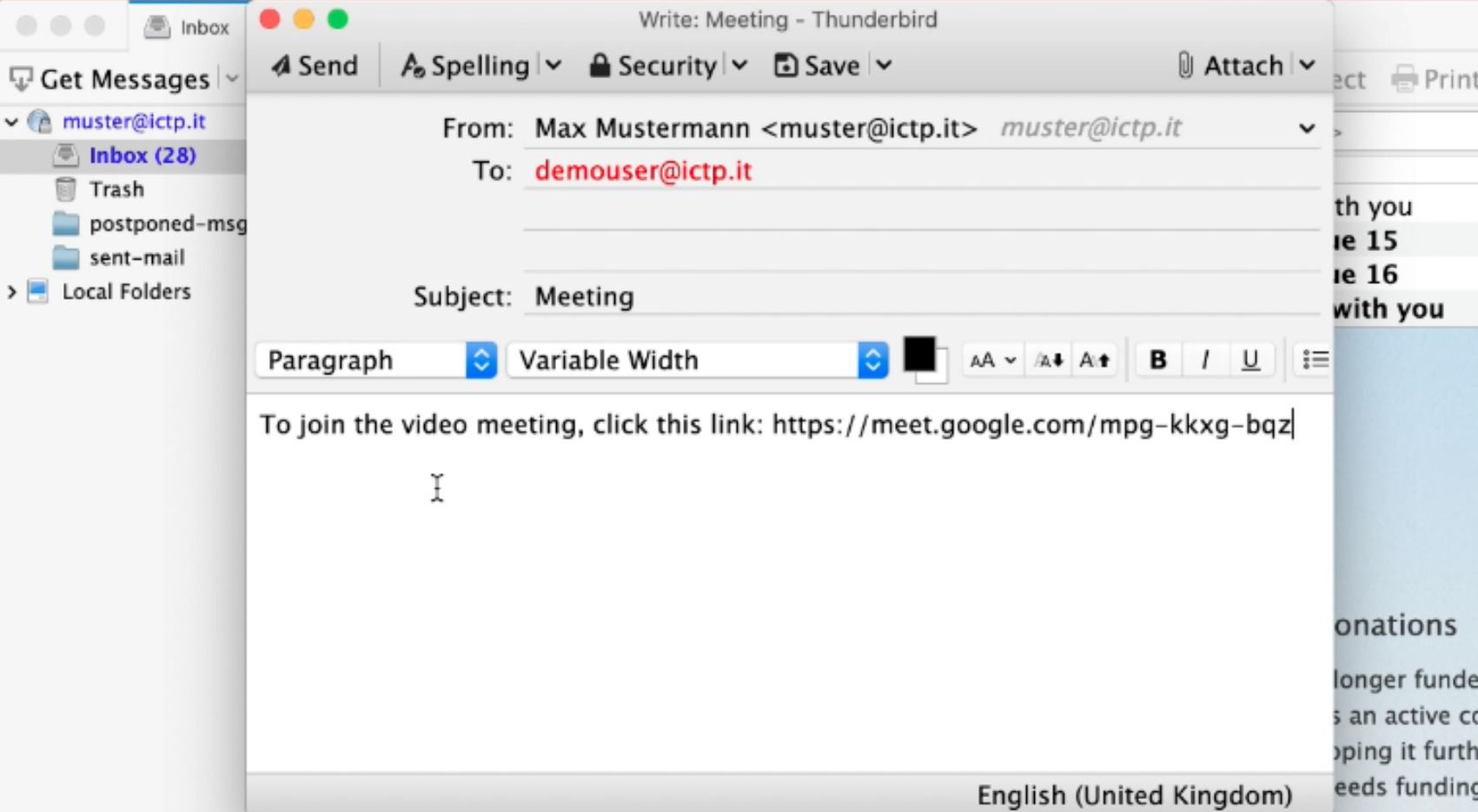
<https://meet.google.com/mpg-kkxg-bqz>



Copy joining info



Add people



From: Max Mustermann <muster@ictp.it> *muster@ictp.it*

To: demouser@ictp.it

Subject: Meeting

Paragraph Variable Width AA A↓ A↑ B / U

To join the video meeting, click this link: <https://meet.google.com/mpg-kkxg-bqz>

I

English (United Kingdom)