



Online **Seminars**

Kick-Off meeting
Monday, September 28

Presenter: **Andreas Döpp**

Moderator: **Markus Büscher**

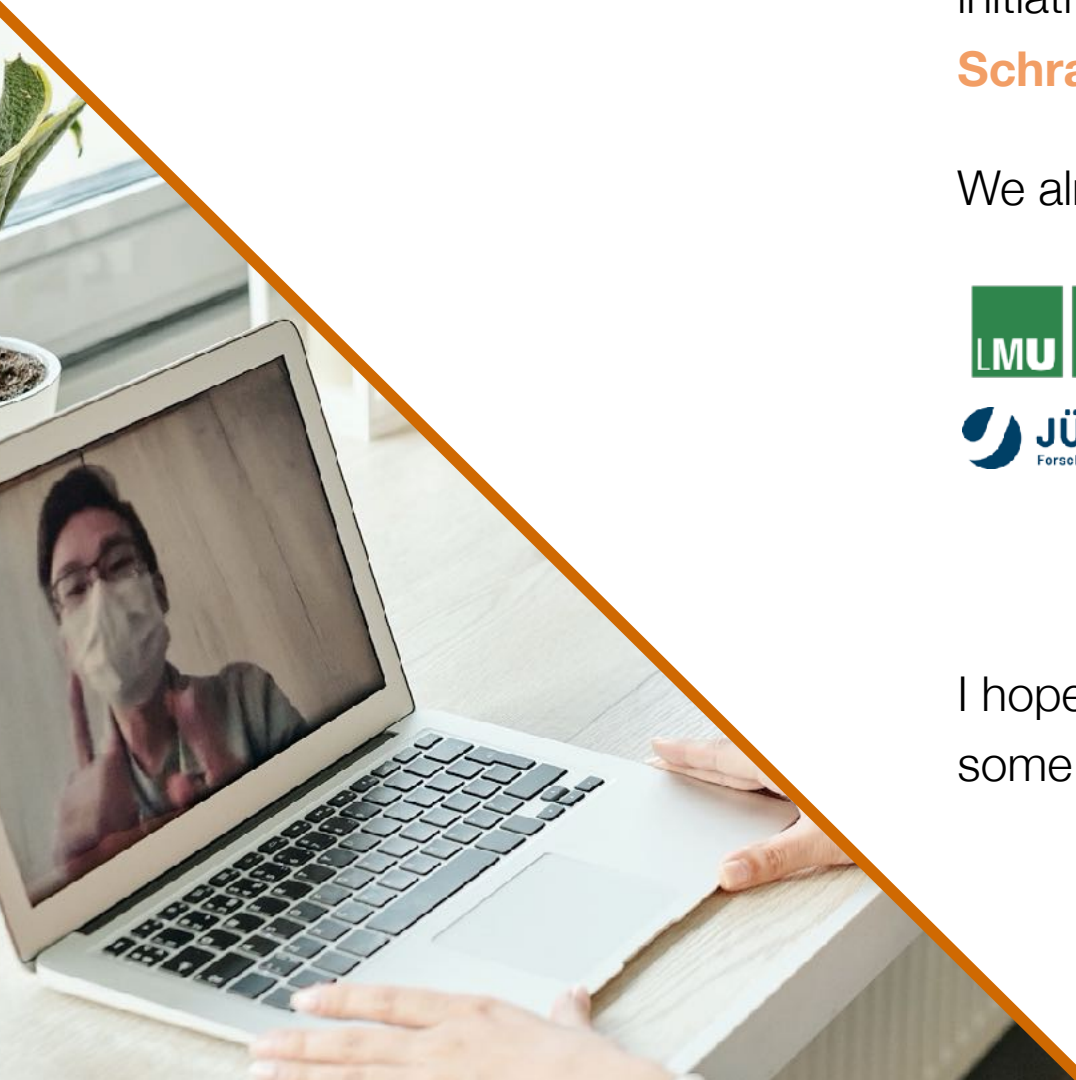
Welcome ... and thank you for joining!

Thank you for the overwhelmingly positive feedback regarding this initiative! Special **thanks to** Markus **Büscher**, Victor **Malka**, Ulrich **Schramm** and Stefan **Karsch**.

We already have confirmed participation by



I hope that all of you are still *'in'* after the presentation ... and maybe some more.



Meeting Outline

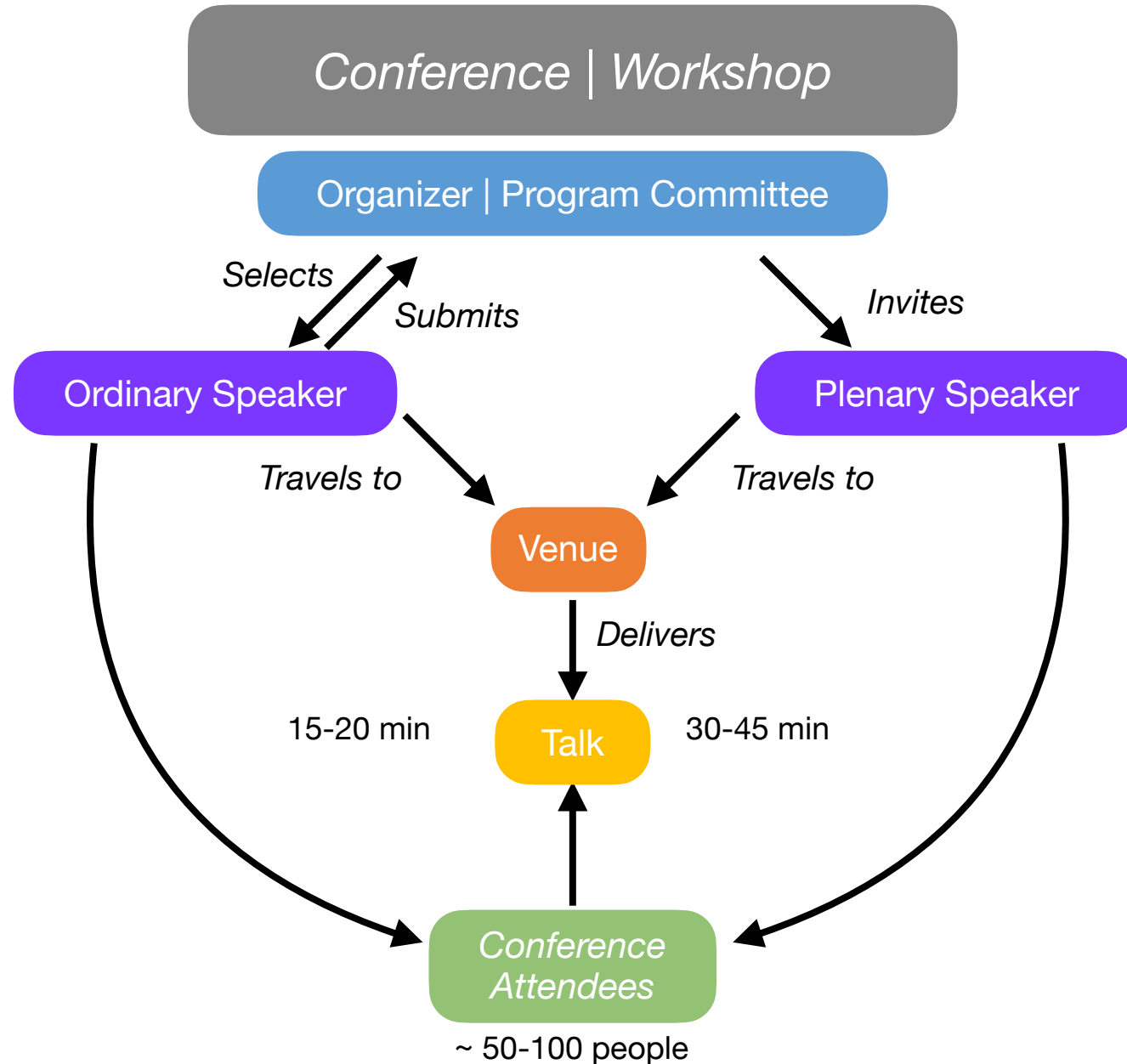
- I. Motivation & Concept
- II. Practical Implementation
- III. Discussion



Motivation & Concept



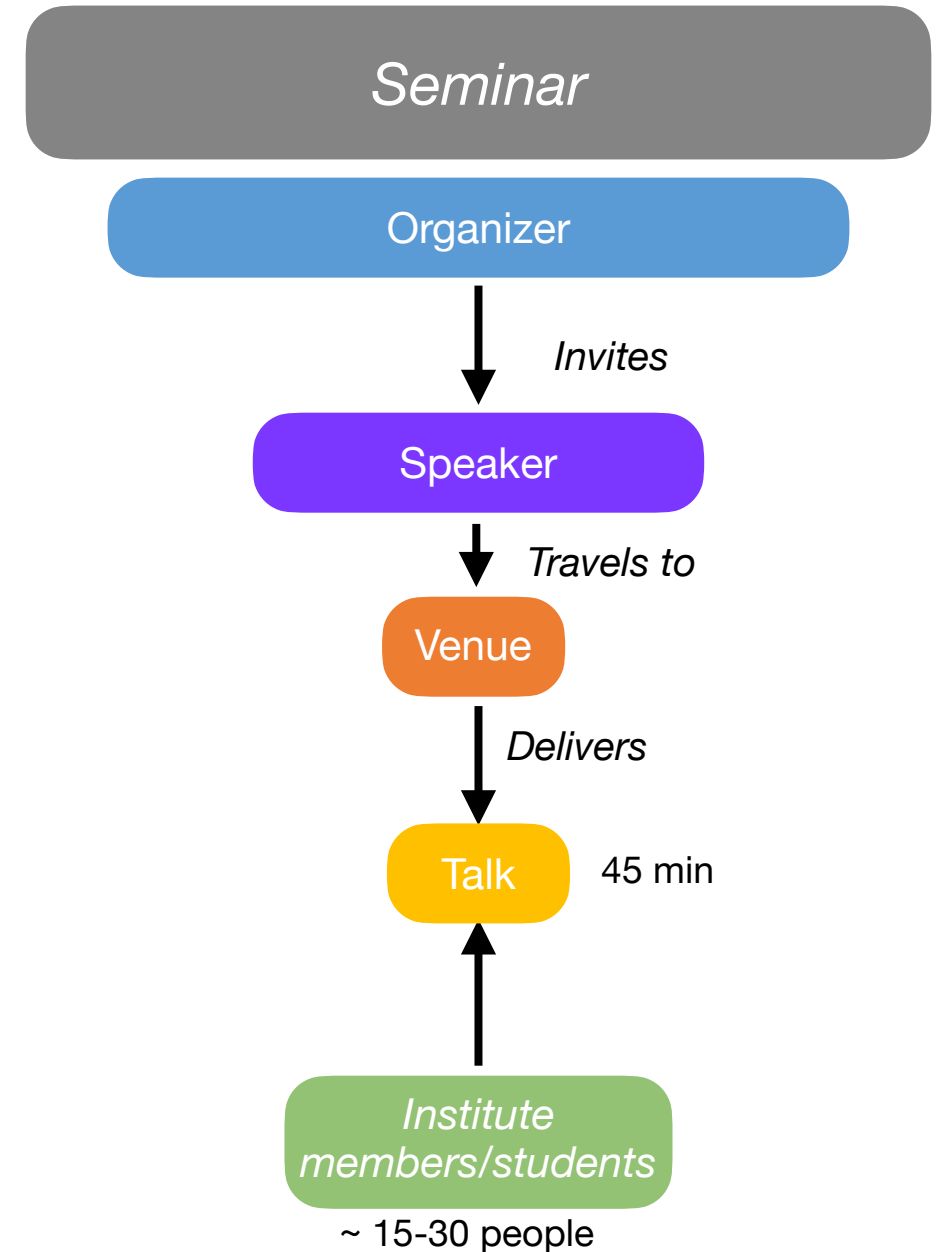
Academic discourse | **Before** COVID-19



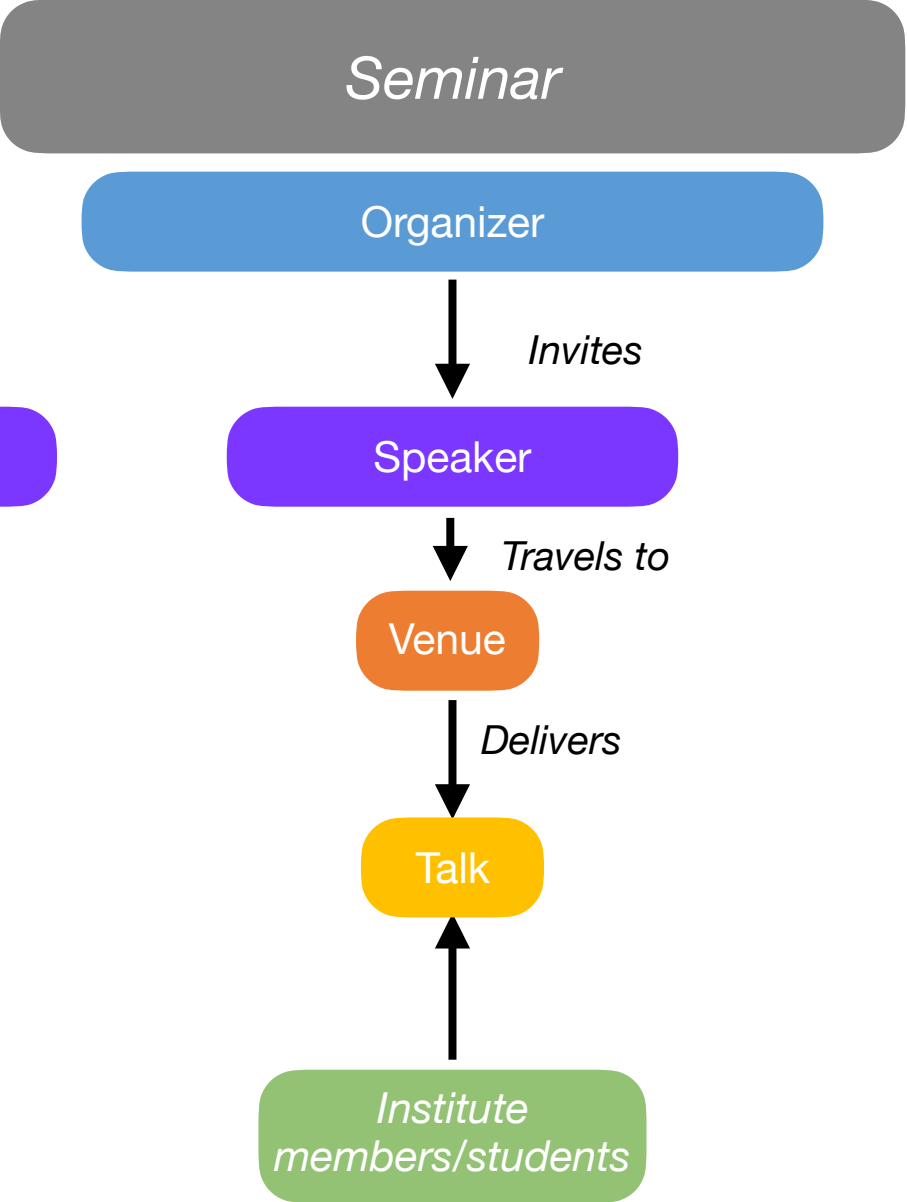
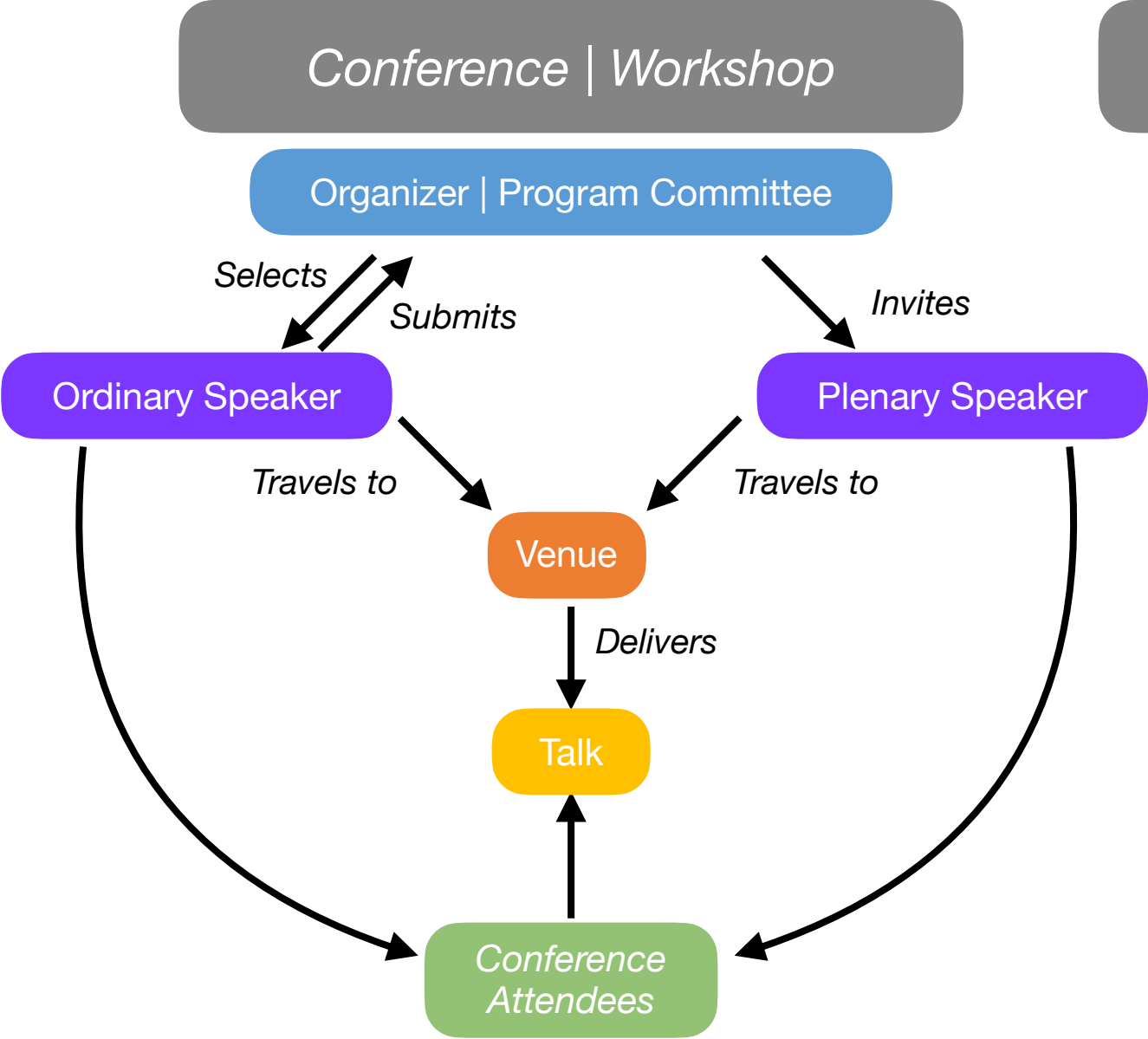
- Contributions by different institutions from all over the world
- Offers a “**Menu**” of talks
 - Long overview and short specialized talks by experts and graduate students
 - Sessions for many different specializations (laser electron acceleration, laser ion acceleration, etc.)
- Regular talks are rather short
- Takes place every 1-3 years (LPAW, AAC, IPAC, etc.)
- **Need to travel to attend. Expensive.** (PhD students usually attend only 1-2 within their studies)

Academic discourse | **Before** COVID-19

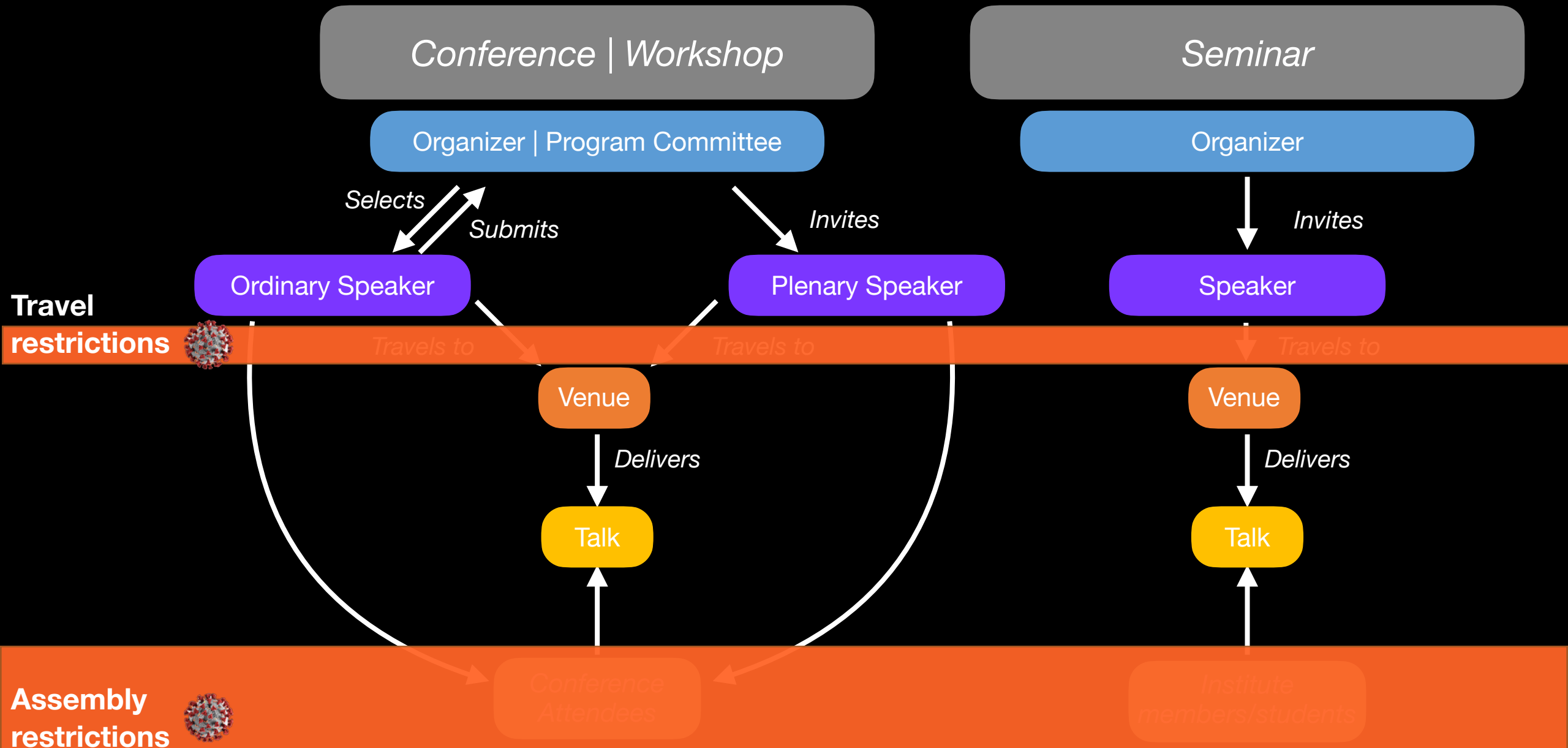
- Both local and external contributions
 - Often distinguished external speakers (visitors) or
 - Local researchers/students
- More time, more pedagogical
- Talk „comes to you“
- Frequency depends on lab-size (from one per year to a few per month)
- Much less choice - few of them will directly lie within your specialization



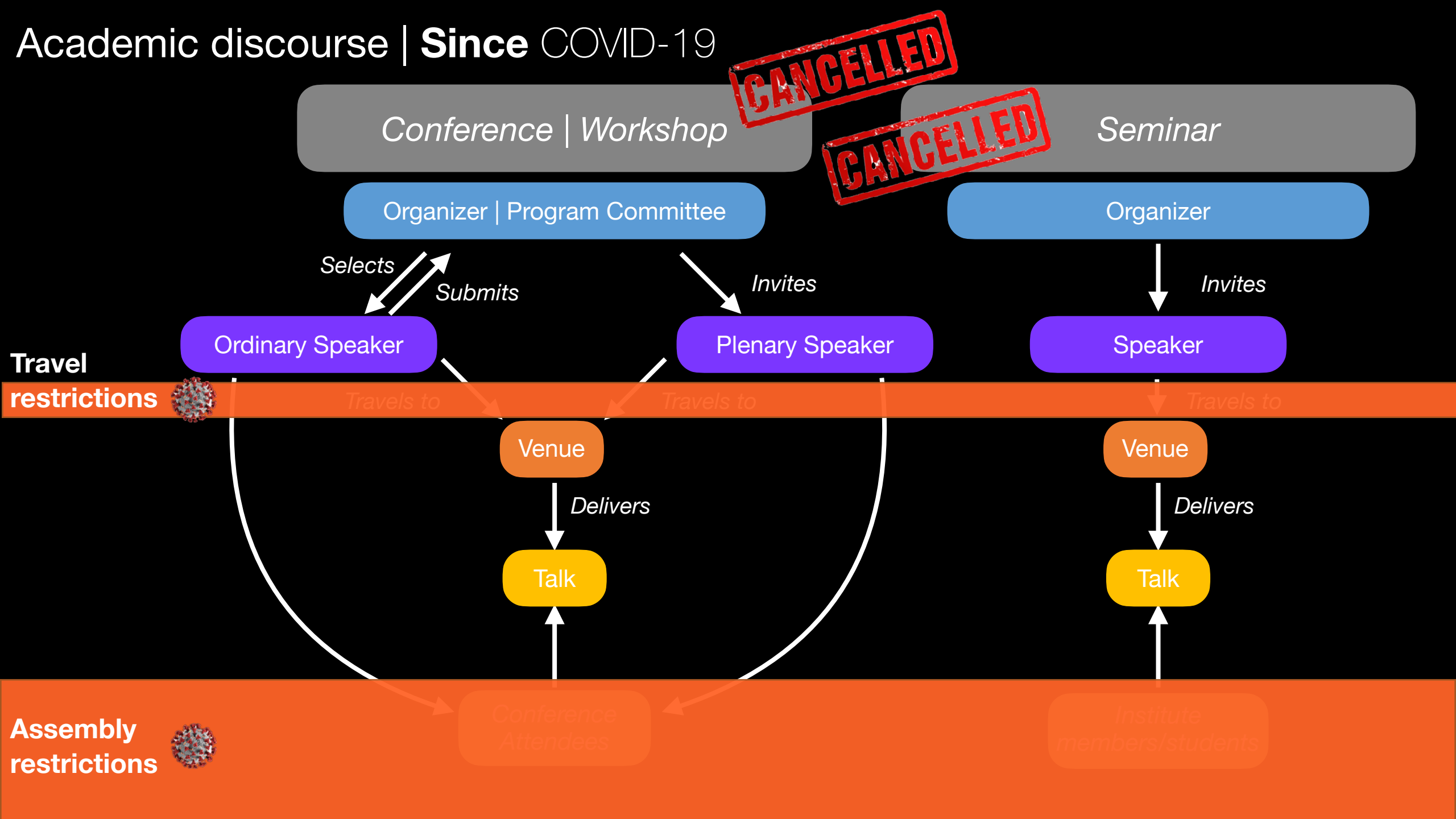
Academic discourse | **Before** COVID-19



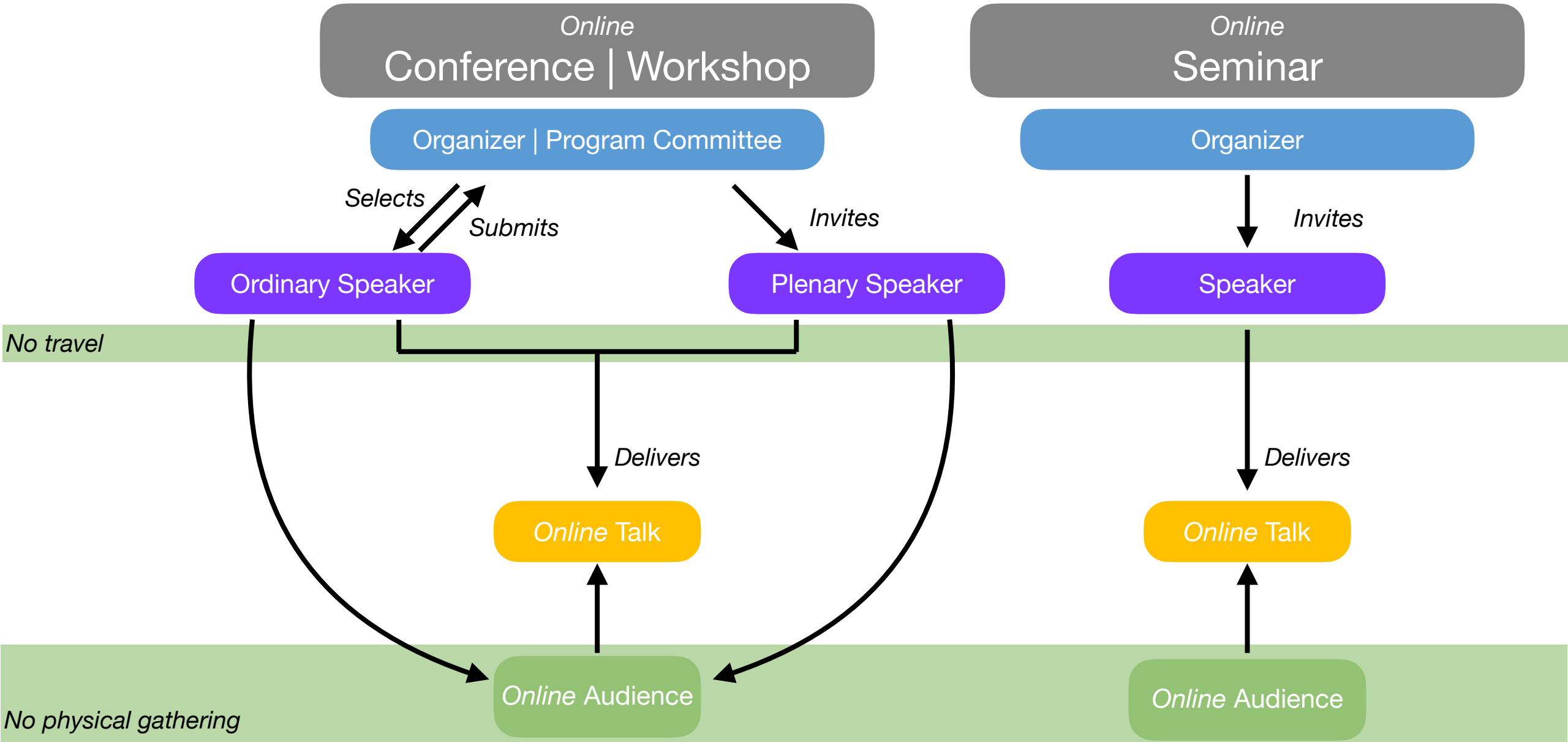
Academic discourse | **Since** COVID-19



Academic discourse | **Since** COVID-19



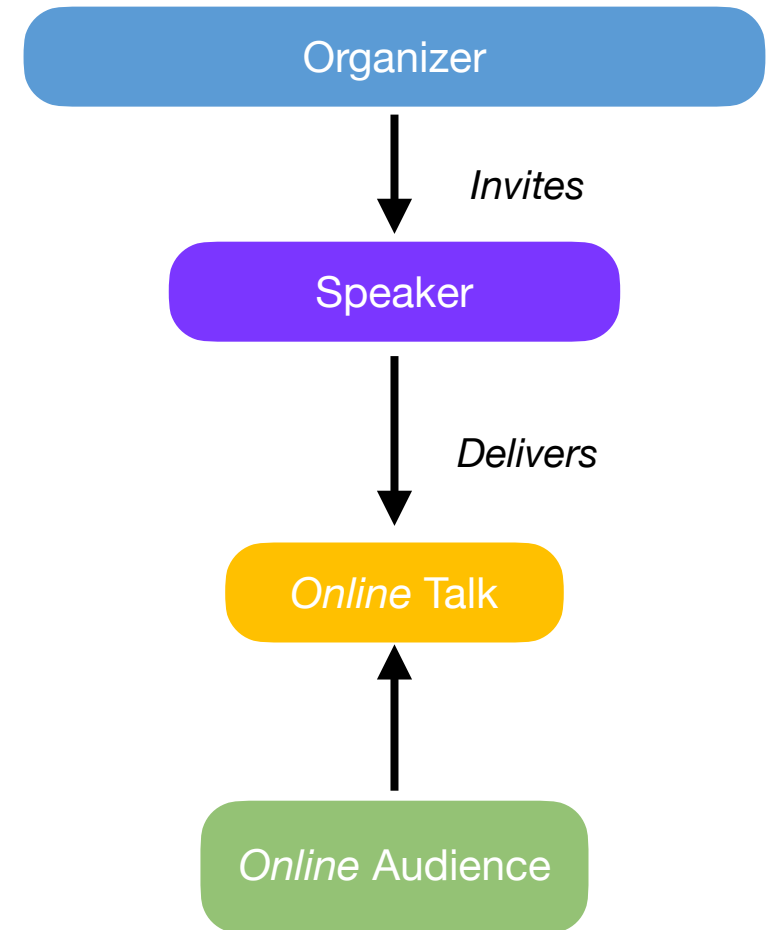
Since COVID-19



Since COVID-19

Example: Quantum Science Seminar

- Quantum Science talks for broad audiences (initially based on ICAP-27: International Conference on Atomic Physics)
 - Started Mid-April. One seminar every Thursday at 17:00 (45 minutes plus questions)
 - YouTube Streaming via Zoom
 - European initiative – US “sister-seminar” vAMOs
-
- + Exemplary organization *(we will discuss this later)*
 - + Well received *(hundreds of views per talk)*
 - Limited number of seminars
(requires committee for selection; representation problem)
 - Only distinguished speakers *(like invited plenaries),*
no time for „regular“ talks from students, etc.
 - Fixed time and format, not flexible *(e.g. people with appointments on Thursday afternoon can never attend live)*

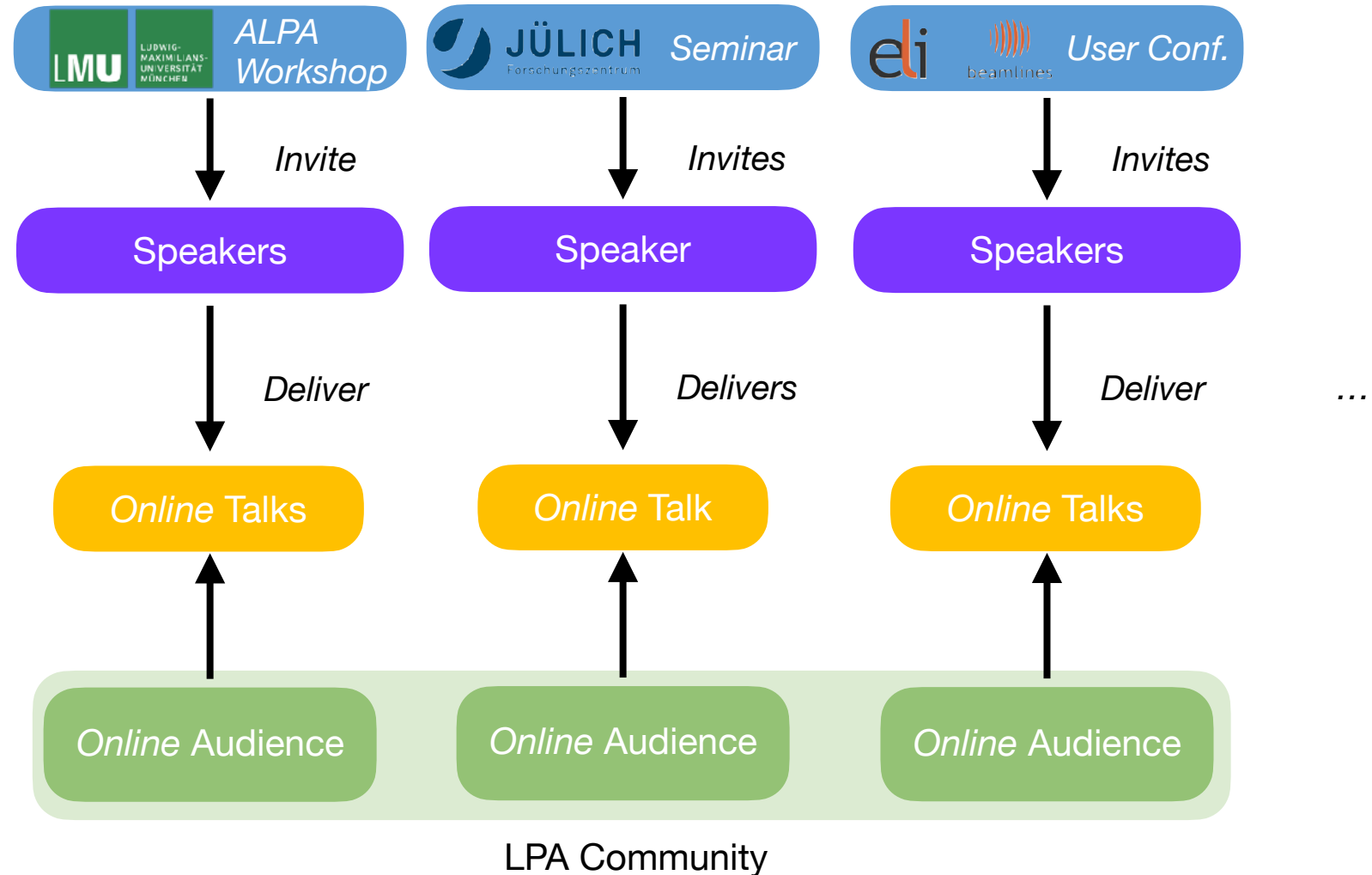


Since COVID-19

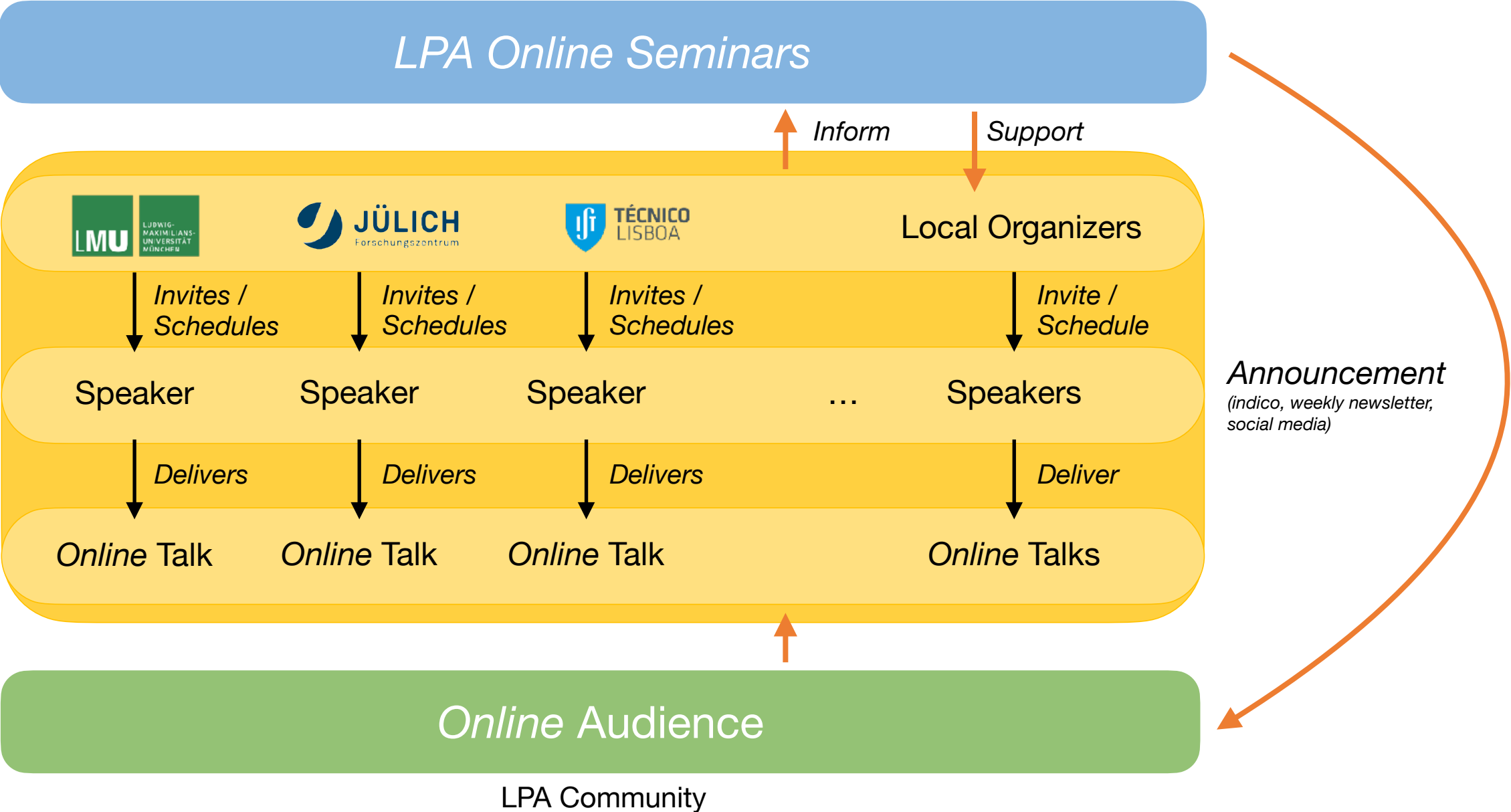
We now see many labs setting up their own online seminars, workshops or meetings in more or less formal way.

These usually only reach lab or university members. But with **geographic restrictions gone**, many of these meetings all have the **entire LPA community as potential audience**.

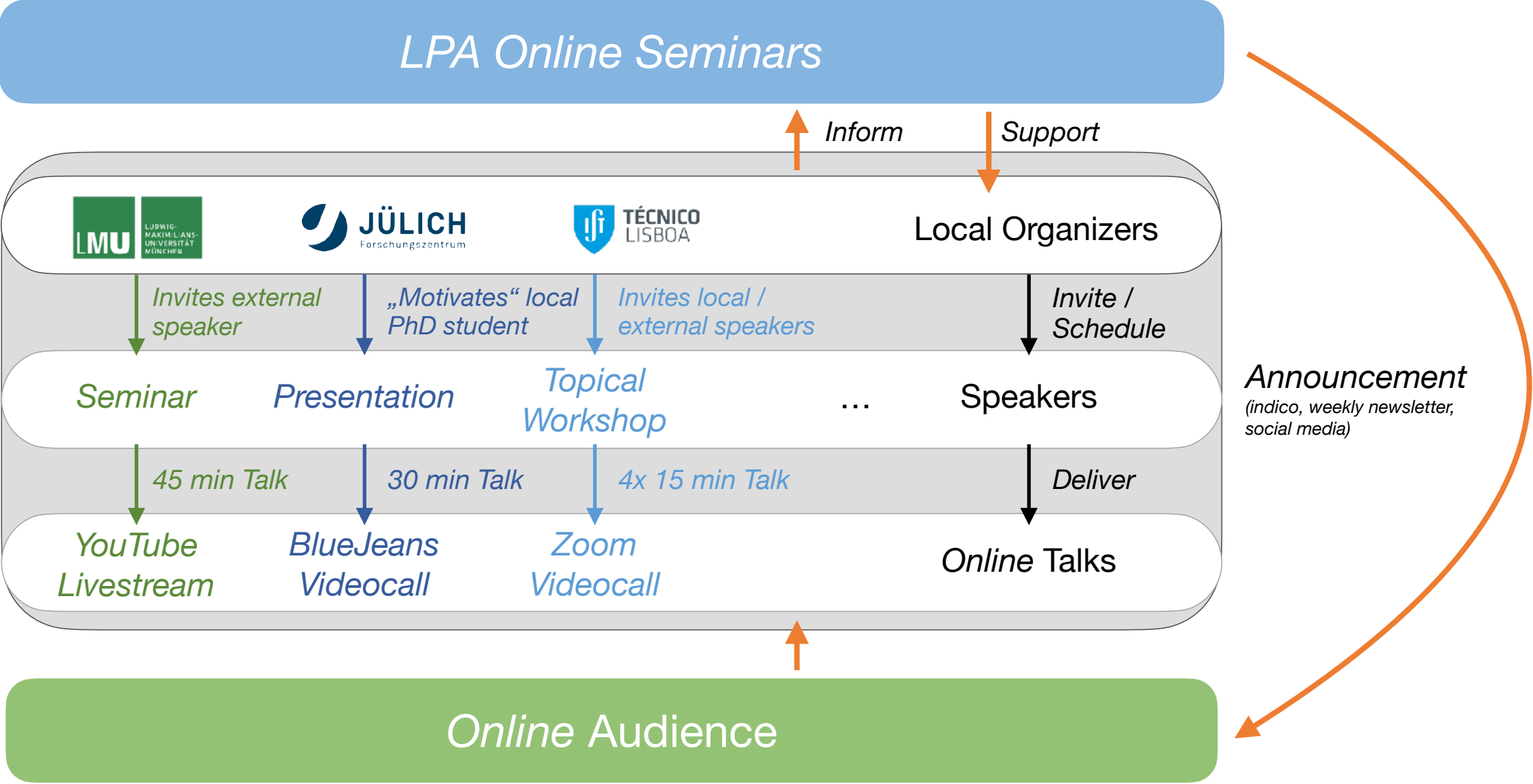
We propose to **establish a joint platform from and for the community** to share online events related to LPA physics and to create dedicated online content.



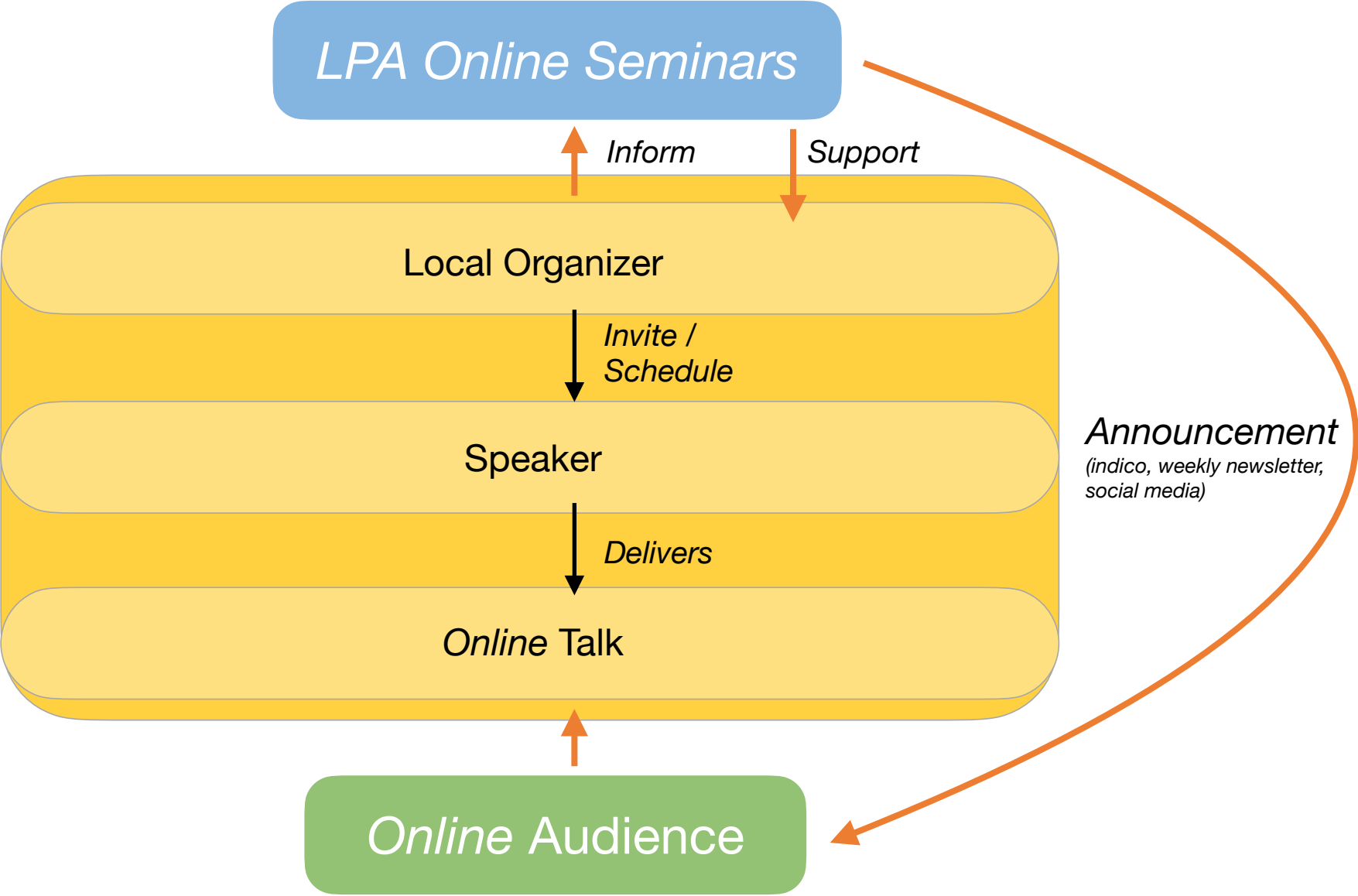
LPA Seminars



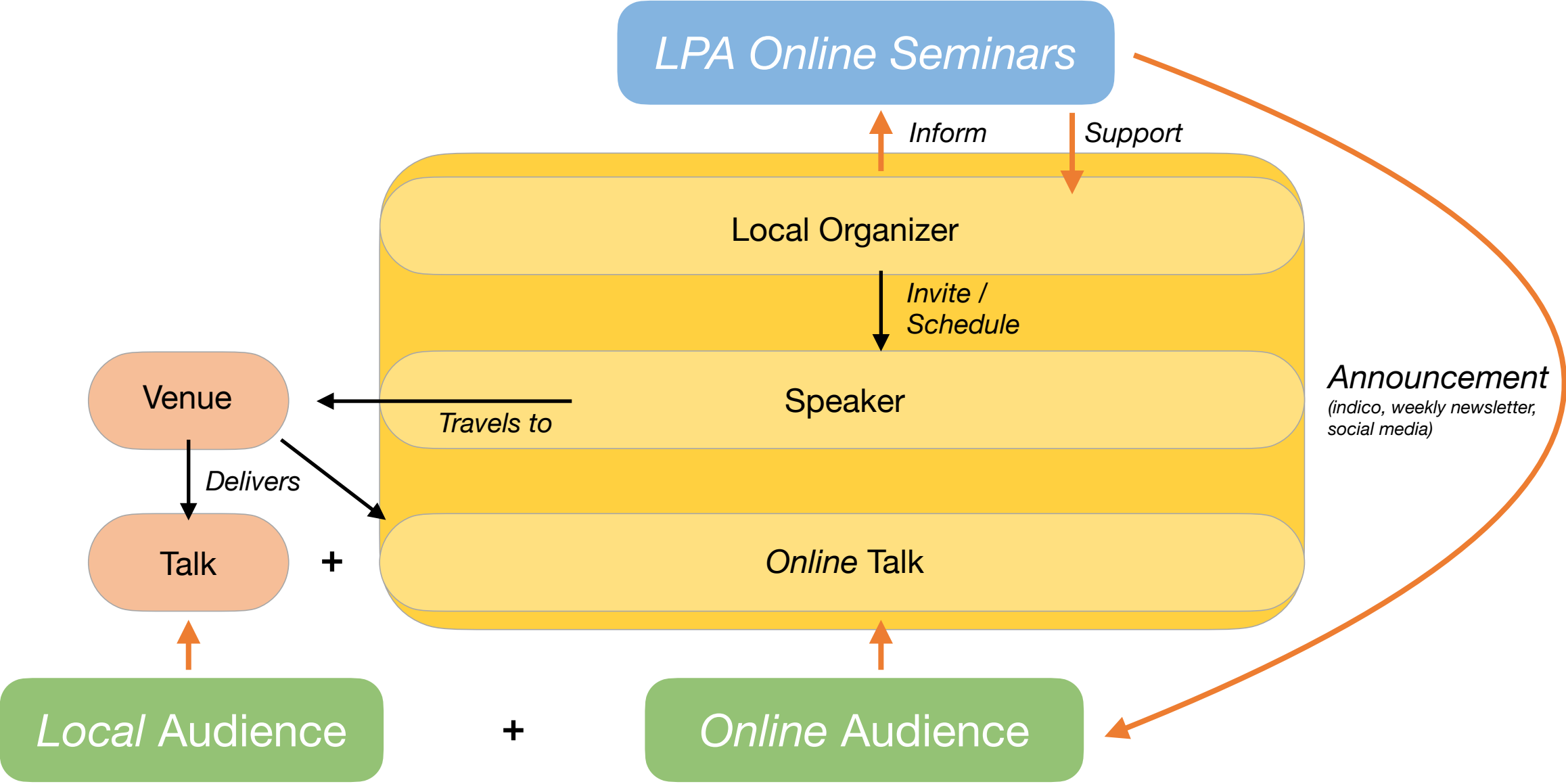
LPA Seminars | A flexible format



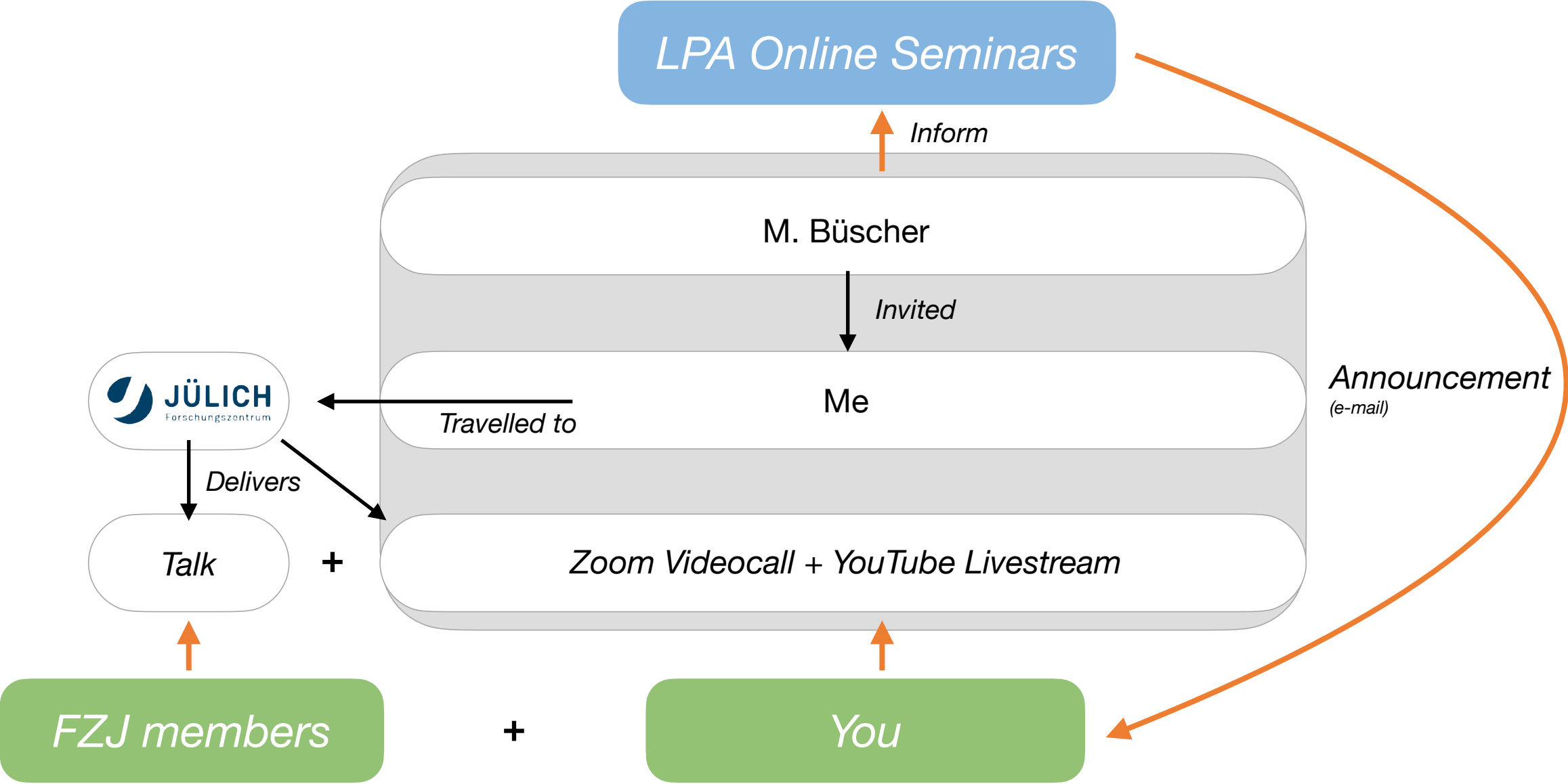
LPA Seminars | In Theory



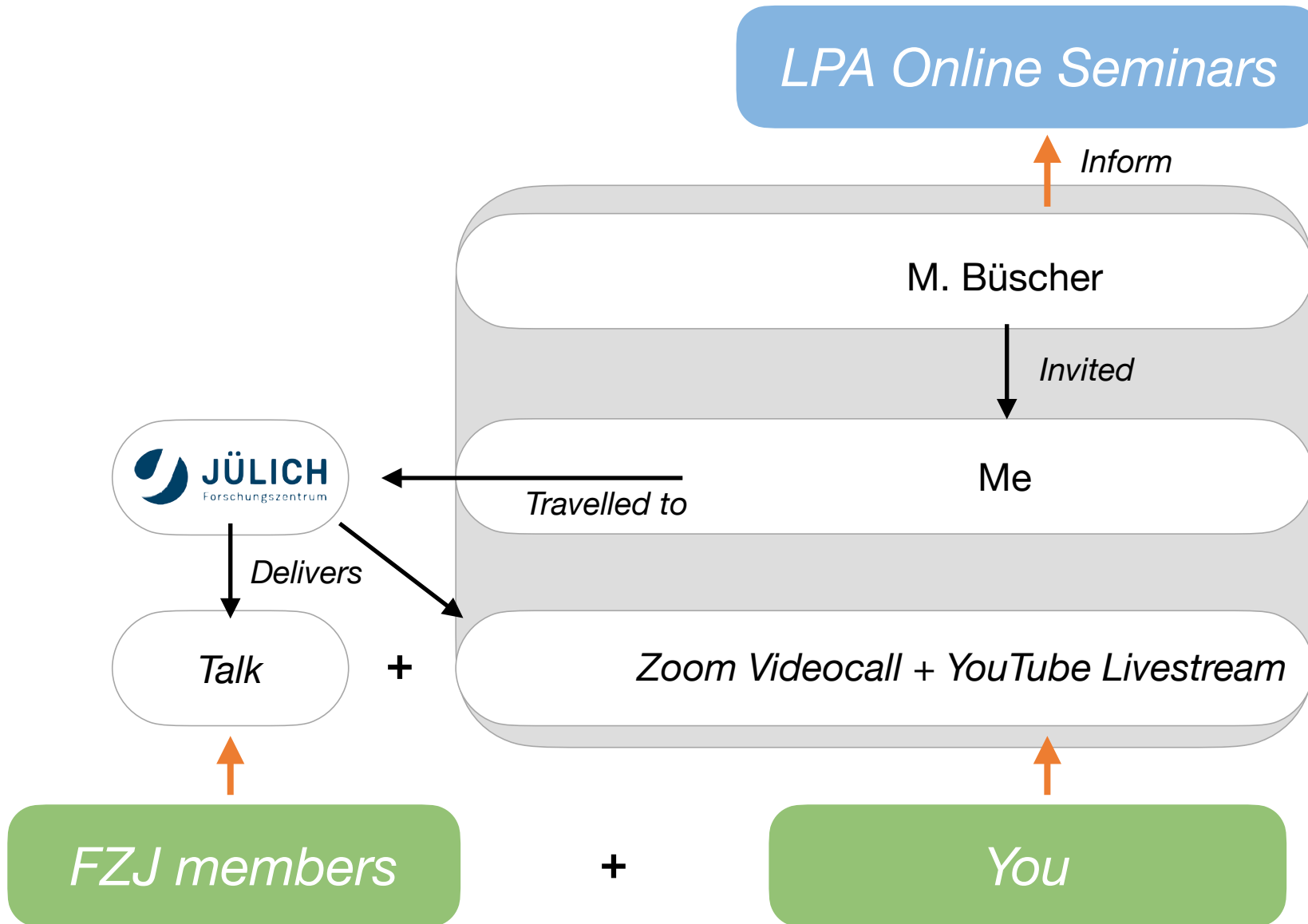
LPA Seminars | The Hybrid



LPA Seminars | The Hybrid



LPA Seminars | The Hybrid



Advantages:

- More natural speaking
(standing, audience in front)
- Adequate even beyond
Corona pandemic (can
continue using newsletter, webpage,
etc. as a community)

Practical Implementation



2

Step 1

Planning & Scheduling



You are welcome to share any events related to the **physics of lasers, plasmas and accelerators**.

This explicitly includes any talk on

- **High-power laser** development and characterization
- Theory or experiments about **plasma acceleration** (LWFA, PWFA, DLA, Laser-ion acceleration, etc.)
- **Secondary sources** (positrons, THz, X-ray, etc.)
- Experiment **diagnostics** (laser diagnostics, beam diagnostics, etc.)
- **Applications** of these sources

Furthermore, you are welcome to share talks from **related fields of reasonable interest to the LPA community**.

Rule of thumb: Would you submit the abstract of the talk to LPAW or AAC? 👍

These are just recommendations and you are free to do what you want. But if your talk too „exotic“ and has little connection to LPA, maybe not many people show up.

Step 1

Planning & Scheduling



Once you have identified a suitable topic and speaker (internal or external), you have to **find a time and date for the talk**.

For this you go on our GoogleDoc and reserve a slot.

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Comments	Partners
September 28	October 2	Kick-Off Meeting					LMU
			Start				FZJ
Oktober 5	Oktober 9					Morning	WIS
			Paul Gibbon		Stefan Karsch	Afternoon	HZDR
Oktober 12	Oktober 16						IST
Oktober 19	Oktober 23						Oxford
							HHU
Oktober 26	Oktober 30				Matt Streater		LOA
							Jena
November 2	November 5						GSI
							Belfast
November 9	November 13		Xiaofei Shen				Salamanca
							Strathclyde
November 16	November 20						
					Peter Norreys		
November 23	November 27		Anna Hützen				
November 30	Dezember 4						
					Kim Ta Phuoc		
Dezember 7	Dezember 11		Ke Jiang				
Dezember 14	Dezember 18				tba		
Dezember 21	Dezember 25	Christmas Break					
Dezember 28	Januar 1						
Januar 4	Januar 8				Claus Schneider		
Januar 11	Januar 15				tba		
Januar 18	Januar 22						
			Andreas Seidel				
Januar 25	Januar 29				tba		

24 weeks from 10/20 - 03/21 (X-mas excluded). Currently 15 confirmed partners, i.e. 30+ talks: Average of 1-2 per week.

We aim for a rather uniform distribution of talks, so please try to avoid conflicting times. At the moment the table allows to reserve either morning (top row) or afternoon (bottom row). We recommend to hold seminars between 11:00 - 16:00 (UCT+1), but other time slots might be preferable e.g. for speakers from Asia or the US. Regular talks with fixed time may help to attract more audience.

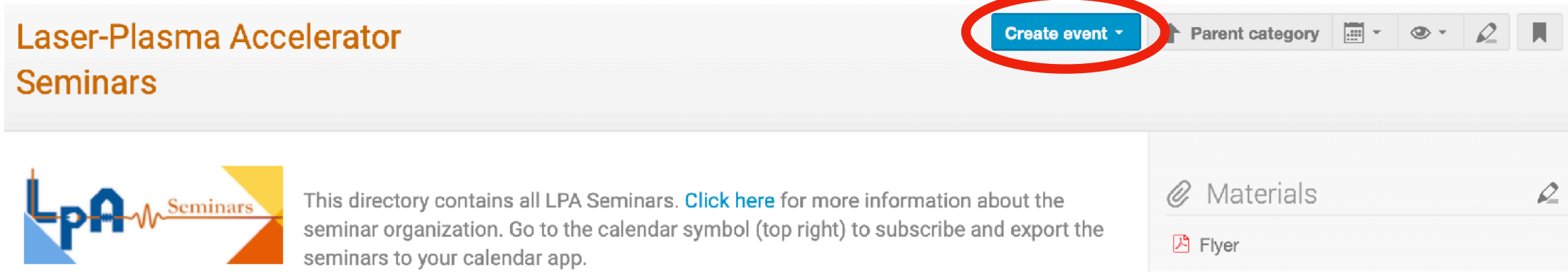
Step 1

Planning & Scheduling

When the date is fixed and confirmed, you can move to the next step, i.e. **publish the event on indico** to inform us about it.


1. Go to indico.lpa-seminars.com

2. Click on „Create Event“



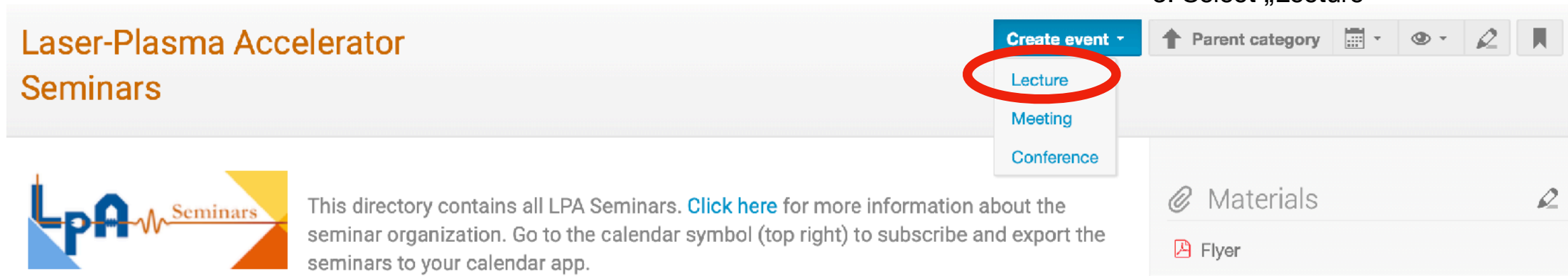
Laser-Plasma Accelerator Seminars

[Create event](#) [Parent category](#) [Calendar](#) [Eye](#) [Edit](#) [Bookmark](#)

 This directory contains all LPA Seminars. [Click here](#) for more information about the seminar organization. Go to the calendar symbol (top right) to subscribe and export the seminars to your calendar app.

[Materials](#) [Flyer](#)


3. Select „Lecture“



Laser-Plasma Accelerator Seminars

[Create event](#) [Parent category](#) [Calendar](#) [Eye](#) [Edit](#) [Bookmark](#)

[Lecture](#)
[Meeting](#)
[Conference](#)

 This directory contains all LPA Seminars. [Click here](#) for more information about the seminar organization. Go to the calendar symbol (top right) to subscribe and export the seminars to your calendar app.

[Materials](#) [Flyer](#)

Step 1

Planning & Scheduling

When the date is fixed and confirmed, you can move to the next step, i.e. **publish the event on indico**.

Create new lecture

Category * Laser-Plasma Acceleration

Choose category

Event title * [Name of Seminar Series] Title of Talk

Dates * 30/06/2020 09:00 120

Add occurrence

Timezone * Europe/Berlin

Location Venue Room

Speakers

There are no chairpersons

Search Enter manually

Protection mode Public Inheriting Protected

Public
This event will be publicly accessible since the category Laser-Plasma Acceleration is not protected.

Advanced

Create event Cancel

1. Please use the following format for the **event title**: „[Name of Seminar Series] Title of Talk“, e.g. „[CALA Seminar] Laser-wakefield Acceleration with ATLAS“ or „[JuSPARC Seminar] Towards kHz laser-plasma acceleration“

2. Add the date and time zone.

3. If the speaker is registered on LMU's indico page, just search for their name. Otherwise chose „enter manually“.

4. If you want the event to be visible to anybody, chose „Public“ or „inheriting“. If you choose protected, only registered LMU indico users can see the event description. We recommend „inheriting“, as you can set protection on any material later.

Step 1

Planning & Scheduling

When the date is fixed and confirmed, you can move to the next step, i.e. **publish the event on indico**.

Create new lecture

Category * Laser Plasma Acceleration
Choose category

Event title *

Dates * 30/06/2020 09:00 12:00
Add occurrence

Timezone * Europe/Berlin

Location Venue Room

Speakers
There are no chairpersons

Protection mode Public **Inheriting** Protected

Public
This event will be publicly accessible since the category Laser-Plasma Acceleration is not protected.

Advanced

Description

Styles Format Font Size A A

Create event Cancel

5. Click on Advanced to add an abstract for the event.

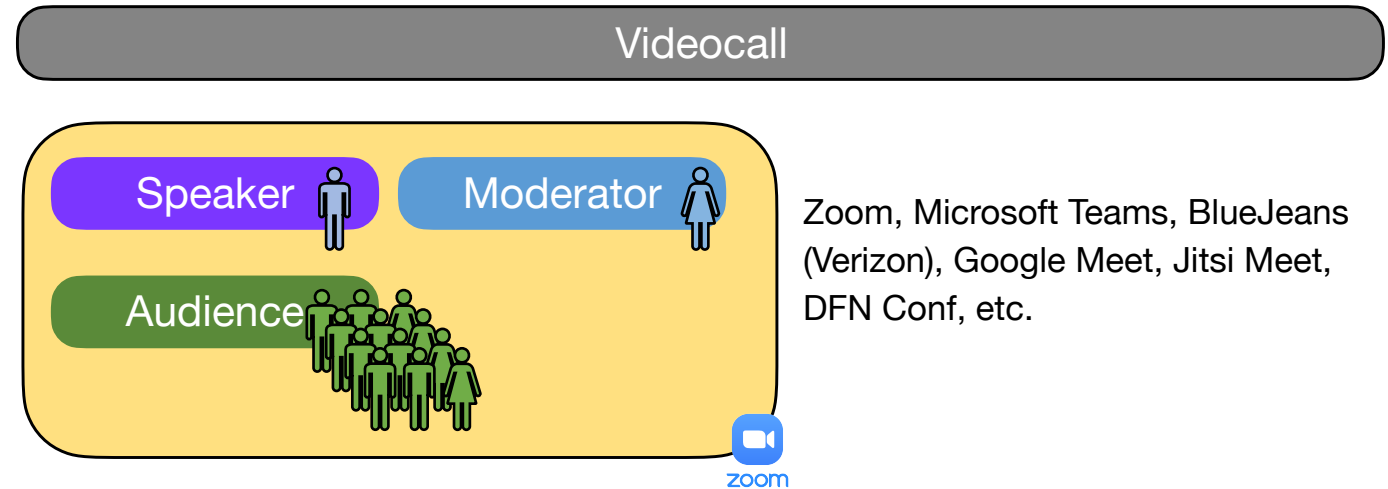
6. Once you are done, click on „Create event“.

Step 2

Setting up an online event



With the event created on indico, you can set up a meeting.



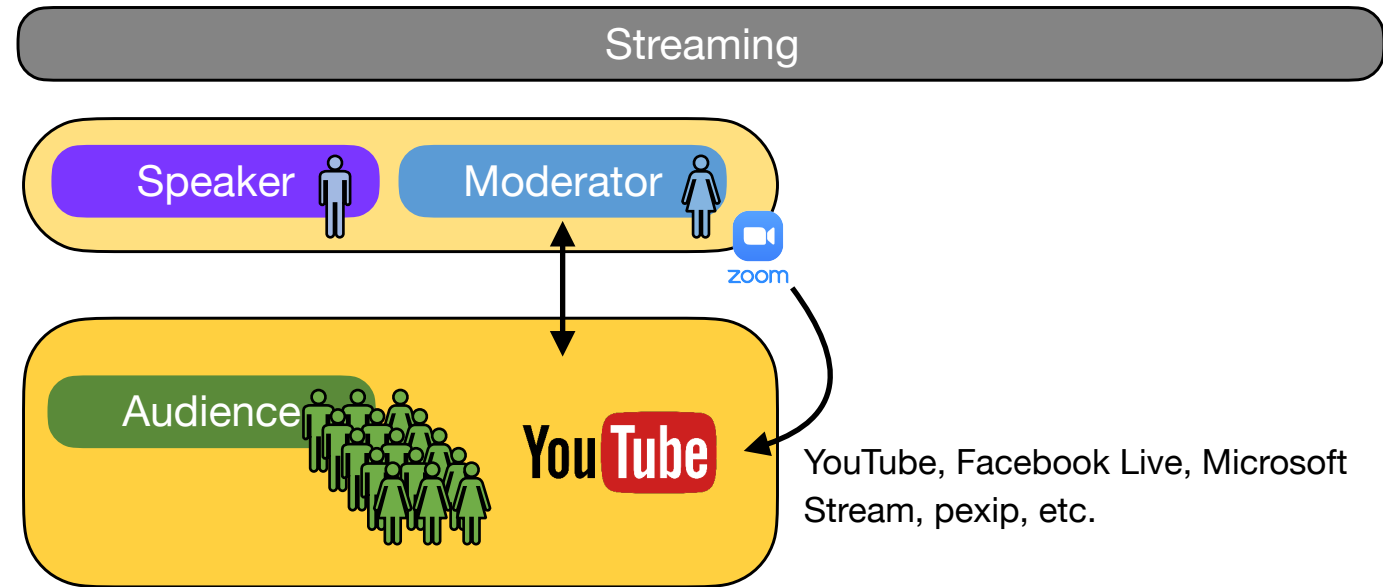
- Easy to set up (*everyone has done it by now*)
- Audience can directly interact with speaker
- Only live. Need to check data protection before recording an event (might require permission from *all* participants). **This is your responsibility as a local organizer.**

Step 2

Setting up an online event



With the event created on indico, you can set up a meeting.



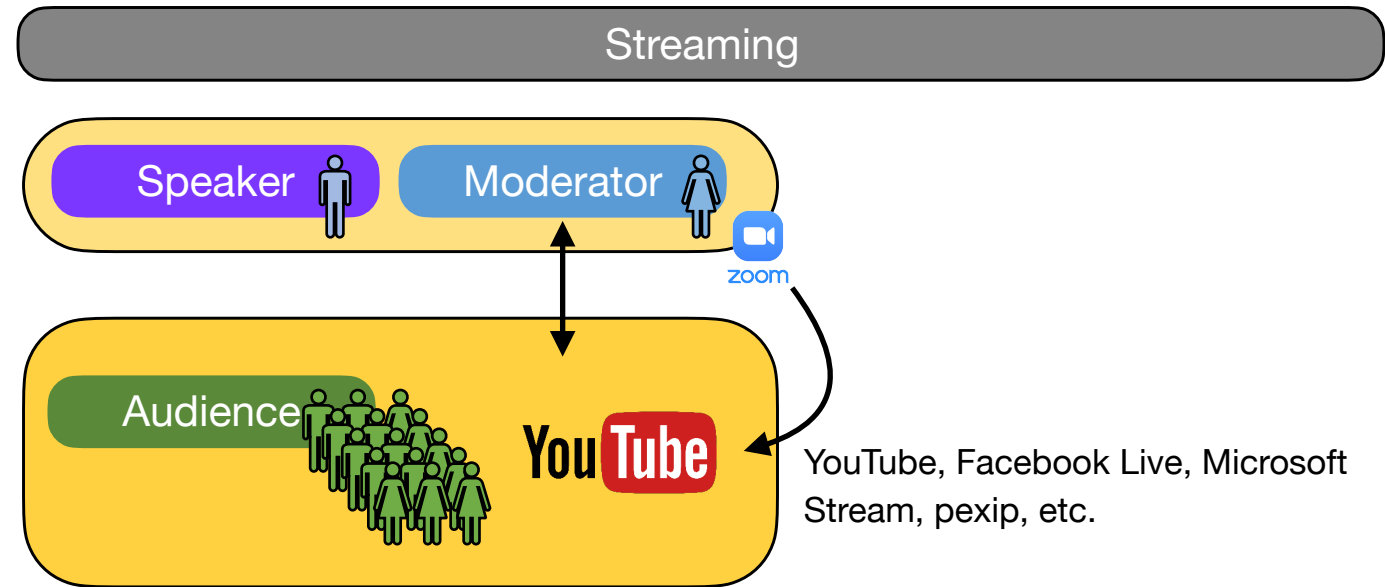
- Speaker and Moderator alone in virtual meeting room. **Recording only requires permission of these two.**
- Audience sees the event with short delay (15-30 s) via streaming. Can ask questions via chat, moderator relays them to speaker.
- **If you join late, you can catch up. If you miss the live talk, you can still watch it later.**
- YouTube directly implemented in Zoom. **You can use our LPA Seminars Channel** (youtube.lpa-seminars.com).

Step 2

Setting up an online event



With the event created on indico, you can set up a meeting.



Public video: Everybody can see it and search for it. Appears in channel history.

Unlisted video: Only people with the link (i.e. those registered on indico, newsletter) can see the video. **Recommended** (*Balance between accessibility and privacy*)

Video can remain online for 1 week, indefinitely, ...

We will offer a **separate tutorial event** for those interested in using YouTube Streaming.

Step 3

Sharing the meeting link

Regardless whether you use Zoom, Teams or Youtube, you will get a **meeting or streaming URL** which you share via **indico**.

To add a link to the event, go to „Materials“

Switch to display view

Settings
Protection
Organization
Materials
Participant Roles
Participants
Reminders
Surveys
Reports
Logs
Customization
Layout
Posters/Badges
Advanced options
Features
Offline Copy
Roles Setup

Test 30 Jun

Created by Andreas Döpp (a.doepp@physik.uni-muenchen.de)

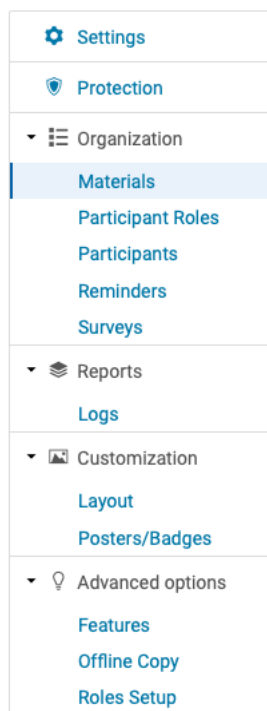
Settings

Home	Title Test Description None Short URL None	Edit
Calendar	Date 30 June 2020 Time 09:00 - 11:00 Timezone Europe/Berlin	Edit
Location	Room None Venue None Address None	Edit
Speakers	Speakers None	Edit
Organizer	Organizer None Contact title Contact Email None Phone None	Edit
Keywords	Keywords None Label None	Edit

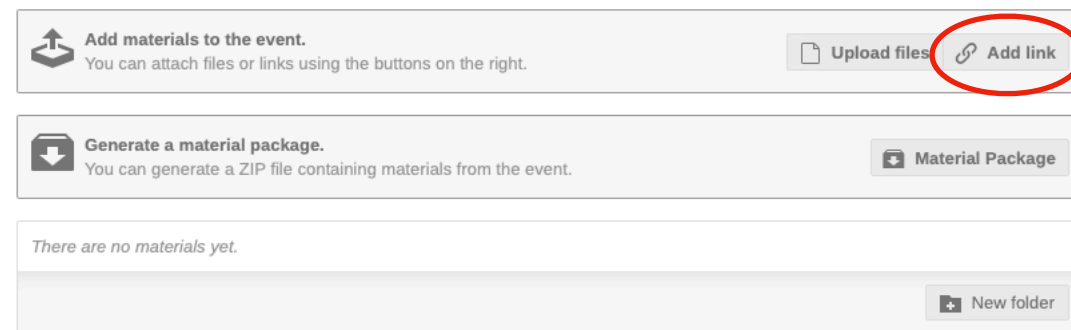
Step 3

Sharing the meeting link

Regardless whether you use Zoom, Teams or Youtube, you will get a **meeting or streaming URL** which you share via **indico**.



Materials



You can also use this to upload related material such as slides etc. after the seminar. Just click on „Upload files“.

Step 3

Sharing the meeting link



Regardless whether you use Zoom, Teams or Youtube, you will get a **meeting or streaming URL** which you share via **indico**.

Add link ✕

URL ★

Title ★

Folder

Adding materials to folders allow grouping and easier permission management.

Protected ☐

Public

This object is publicly accessible since Test (Event) is not protected.

Access control list

The list of users and groups allowed to access the material

1. Insert the **link to access the event**, e.g.

2. **Name the Link** appropriately

3. Select if the link is **protected or public**. If you select public, anyone who can see the indico event can also see the link. If you **select protected** only indico users can view it. We recommend using the protected

Protected ☒

Protected

This object is **only** accessible by the users specified below and the managers of parent resources.

Access control list

The list of users and groups allowed to access the material

Step 4

Relax. Now it's our turn.



Step 4

Announcement



Indico (indico.lpa-seminars.com)

Following the previous steps your event is listed on indico and registered users can find all info to attend it.

Newsletter (newsletter.lpa-seminars.com)

The week before it **we will send a newsletter** to announce all upcoming events (title, abstract, meeting link?). **FZJ has volunteered to take care of the newsletter** 🙌.

Please send me a list of people you would like me to add to the newsletter (researchers, students, etc.). For discussion: Should we announce only to partners, to EU community or to world-wide community?

Social Media (twitter.lpa-seminars.com)

We can also announce events on social media (Twitter, Facebook, etc.). **Volunteers to help with this are welcome** 🙋.

Step 5

Preparing for the talk

- On the day of the talk, **check that everything works before the talk**. Make sure the presenter's computer has a reliable internet connection.
- If possible, hold the talk in front of an audience, not in front of the computer.
- We suggest to use screen sharing to show slides.
- For good audio quality, consider using external microphones (lavalier or condenser microphones). Consumer electronics can do the job.



Step 6

The Talk



 **LUND**
UNIVERSITY

 **LLC**
LUND LASER CENTRE

1st General Organization

Atomic photoionization using attosecond pulses

Anne L'Huillier
Lund University
Sweden

0:39 / 1:05:55

Quantum Science Seminar #10 - Anne L'Huillier

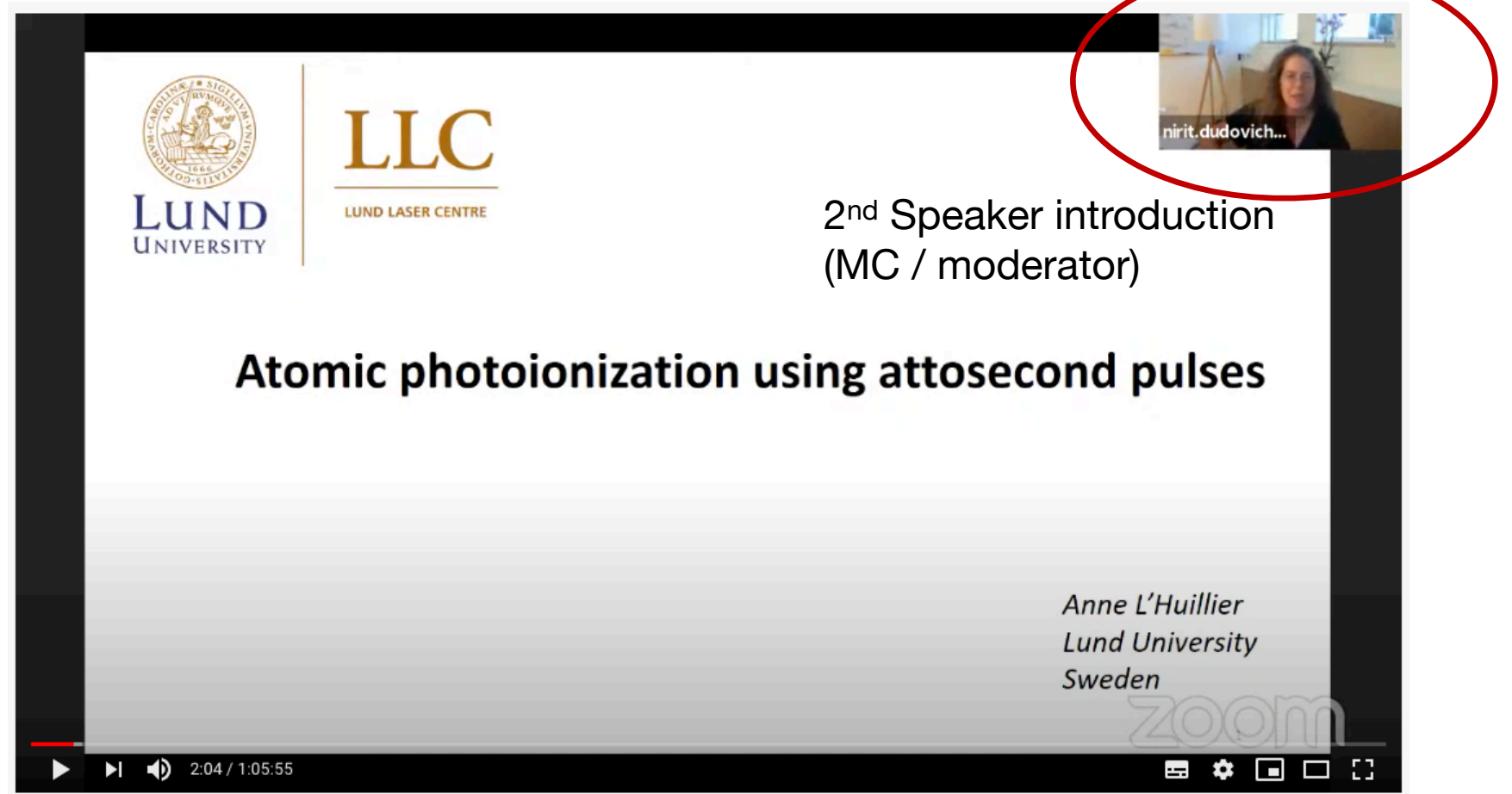
599 Aufrufe • Live übertragen am 25.06.2020

14 0 TEILEN SPEICHERN ...

Step 6

The Talk

Short introduction
of the speaker



The image shows a Zoom video player interface. The main content is a presentation slide with the following elements:

- Logos:** Lund University logo (a circular seal) and the LLC (Lund Laser Centre) logo.
- Title:** "Atomic photoionization using attosecond pulses" in large, bold, black font.
- Speaker Information:** "Anne L'Huillier", "Lund University", "Sweden" in the bottom right corner.

On the right side of the slide, there is a small video feed window showing a woman with long dark hair. The name "nirit.dudovich..." is visible below the video feed. This video feed window is circled in red.

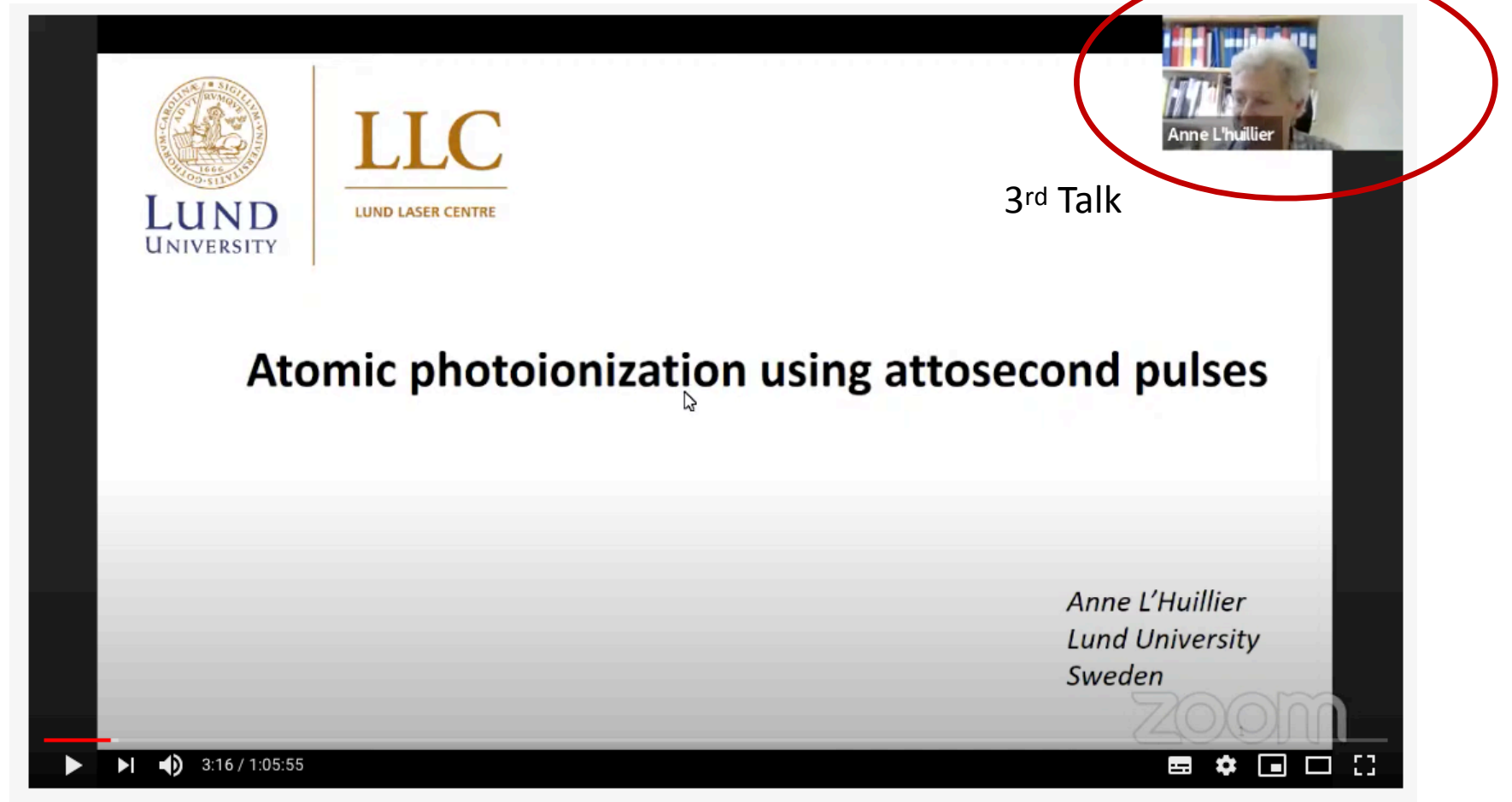
At the bottom of the Zoom player, there is a playback bar with a play button, a progress bar, and a timestamp "2:04 / 1:05:55". There are also icons for chat, settings, and other Zoom controls.

2nd Speaker introduction
(MC / moderator)

Step 6

The Talk

Talk, duration depends
on event type



The screenshot shows a Zoom video player interface. The main content is a presentation slide with the following elements:

- Logos:** Lund University logo (a circular seal) and the LLC (Lund Laser Centre) logo.
- Title:** "Atomic photoionization using attosecond pulses" in large black font.
- Speaker:** Anne L'Huillier, Lund University, Sweden.
- Video Feed:** A small video window in the top right corner shows Anne L'Huillier speaking. This window is circled in red.
- Zoom Player Controls:** At the bottom, there is a play button, a progress bar showing 3:16 / 1:05:55, and icons for chat, settings, and full screen.

Step 6

The Talk

4th Q&A

Challenges

Next 1-2 years

Ultracold Atoms

~1000 atoms

Tweezer Arrays

~100 atoms

Ion Traps

~50 atoms

larger

1 cm

813 nm

High power and robust cavity lattices

tuneout 1S_0 (2P_0)
689 nm (633 nm)

20 μm

1 μm

Controllability

Big advantage: all atoms (molecules) are the same! (built by nature)

55

165 μm

11

Immanuel Bloc...

1:03:21 / 1:05:40

Wiedergabe des Top Chats

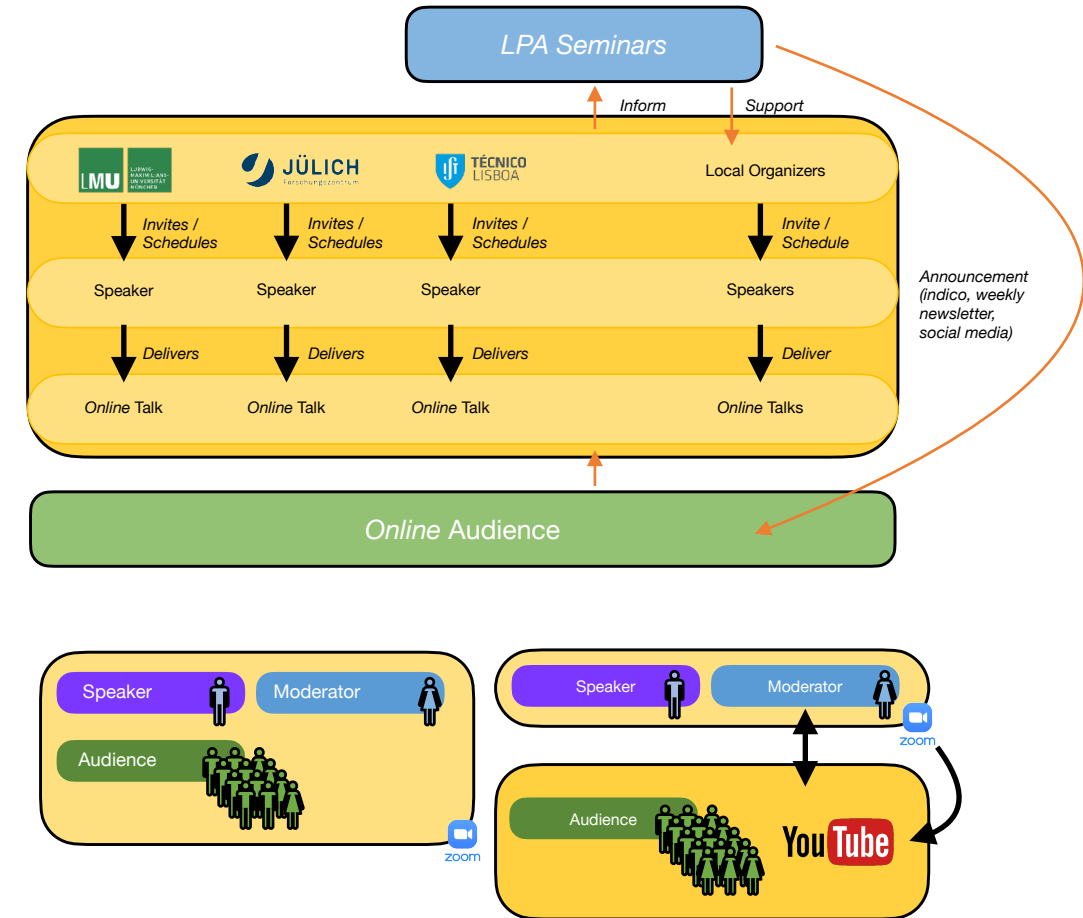
- William Phillips Most methods for making a spin system half up and half down will produce a distribution of up vs. down. Could you say more about that.
- m kn Could you tell us how the temperature is measured?
- ilian despard You talk about running the experiment tens of thousands of times, however the cycle time for these experiment can be quite high. Could you discuss any improvements you have implemented to speed it up?
- Tobias Grass What happens when there are two holes on neighboring sites? Does it still squeeze to an AFM when removing the holes?
- Luis A. Peña Ardila when you go from the polaron to the crossover regime, what would be the effect of the polaron-polaron interaction (if any)?
- Qi-Yu Liang Can you say more about imaging different spins/planes in one experimental run? Does the imaging mutually affect each other? How long between the images?
- Rakesh Arul how analogous is the polaron to strange metal phase in superconductors? is there a way to measure mobility/resistance of polaron v.s. temperature showing linear behaviour (as in the strange metal)?
- m kn Do you see the spatial pattern of stripes or charge density waves in the cross-over regime?

CHATWIEDERGABE AUSBLENDEN

Summary

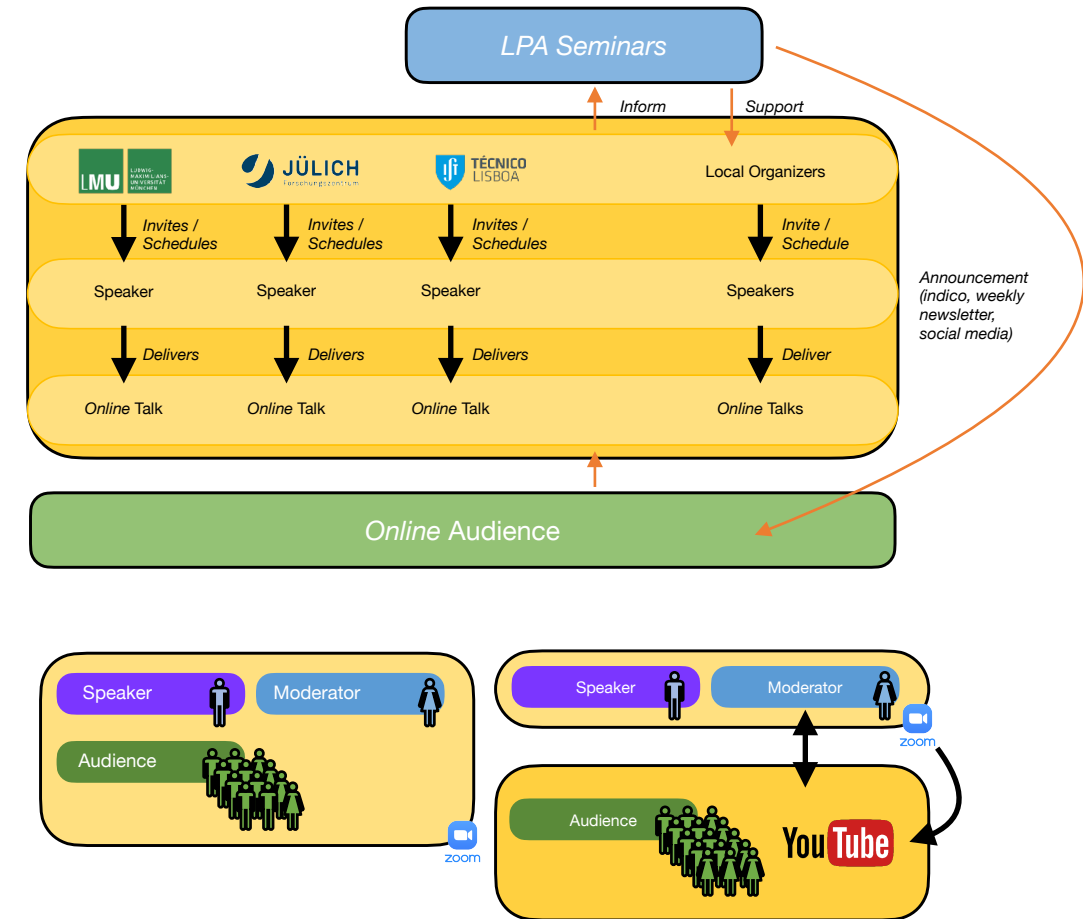
Focus on flexibility, simplicity and shared organization

- **Flexible format** (Seminar, Talk, Lecture, etc.)
- **Flexible medium** (Zoom, Teams, YouTube, etc.)
- **Flexible contribution** (*as much as you want, when you want*)
- Uses indico and e-mail newsletter as main announcement media
- LPA Organizers provides support and recommendations
- Joint format provides widest possible audience
- No main seminar, but rather a „menu“ to pick from
- If accepted by the community, it can be used and extended beyond pandemic (lectures, tutorials, topical weeks, etc.)



What's next?

- Is **everyone** okay with this plan?
- All partners should **schedule** at least **two events** in October to March period.
- Would be good to have **one fixed contact person** per partner to sort out technical details and day-to-day business (maybe a postdoc?)
- Need to set up **E-Mail list for newsletter**. Only partners (if so, how to enforce?) or whole community (if so, does anybody have a good e-mail list?)
- **Organization team is rather small** (and exclusively German) at the moment. Should we extend the core team?
- In any case: Meeting in December/January to evaluate strategy.



Discussion

Questions?

Comments?

Suggestions?

3



