

ELIXIR Workflow Workshop

Mon 29th Nov – Wed 1st Dec 2021

[Naveed Ishaque](#)

Digital Health Centre, Berlin Institute of Health @ Charite



Acknowledgements

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CWL

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workflUX - The Workflow User eXperience

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WESkit

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Snakemake

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OpenEBench

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Nextflow

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- Evan Floden, *Seqera Labs, Spain*
- Luca Cozzuto, *CRG, Spain*

nf-core

- Gisela Gabernet, *Uni Tübingen, Germany*
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Reproducibility in bioinformatics research

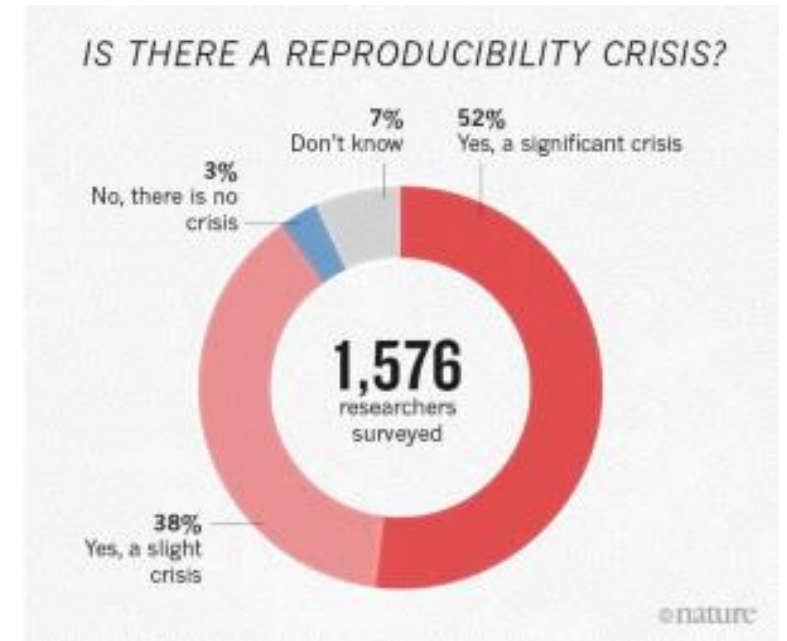
Reproducibility is a cornerstone of good scientific practice

Reproducibility in bioinformatics:

- documentation
- data
- code

We are in the midst of a reproducibility crisis:

- “... more than half have failed to reproduce their own experiments”



<https://doi.org/10.1038/533452a>

Reproducibility in bioinformatics research

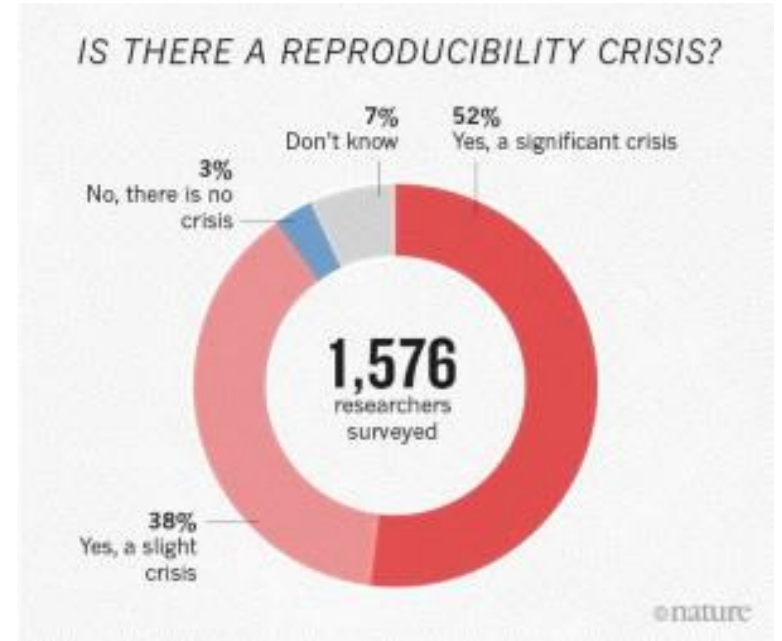
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- documentation
- data
- code

We are in the midst of a reproducibility crisis:

- “... more than half have failed to reproduce their own experiments”
- ... but there is light at the end of the tunnel!



<https://doi.org/10.1038/533452a>



nextflow nf-core



The workshop: preparation and engagement

Be prepared! <https://elixir-workflow-workshop.github.io/2021/preparation.html>

The workshop will be recorded

Virtual social event via Gather.Town on Tuesday evening 18:00... open to all!

Two levels of participation

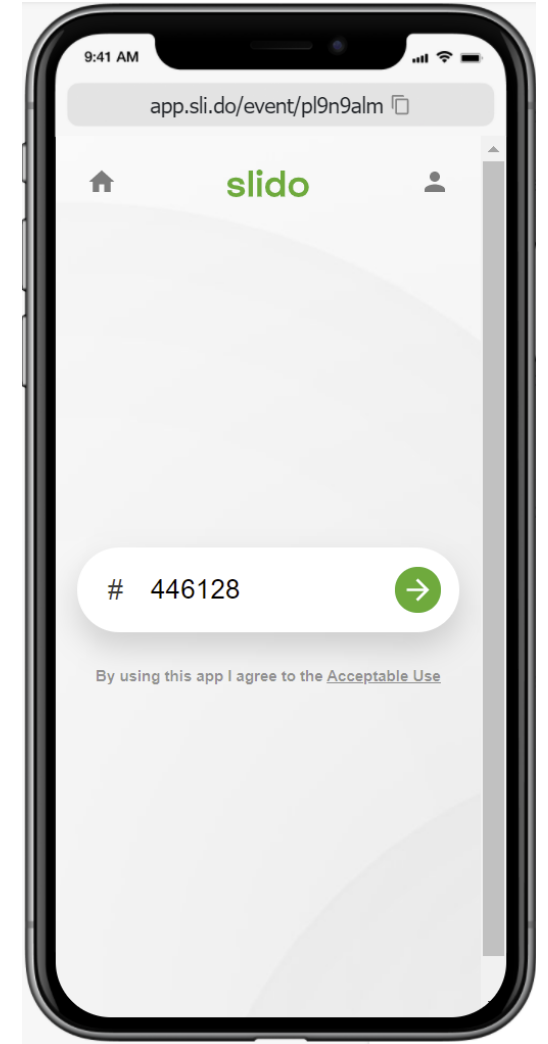
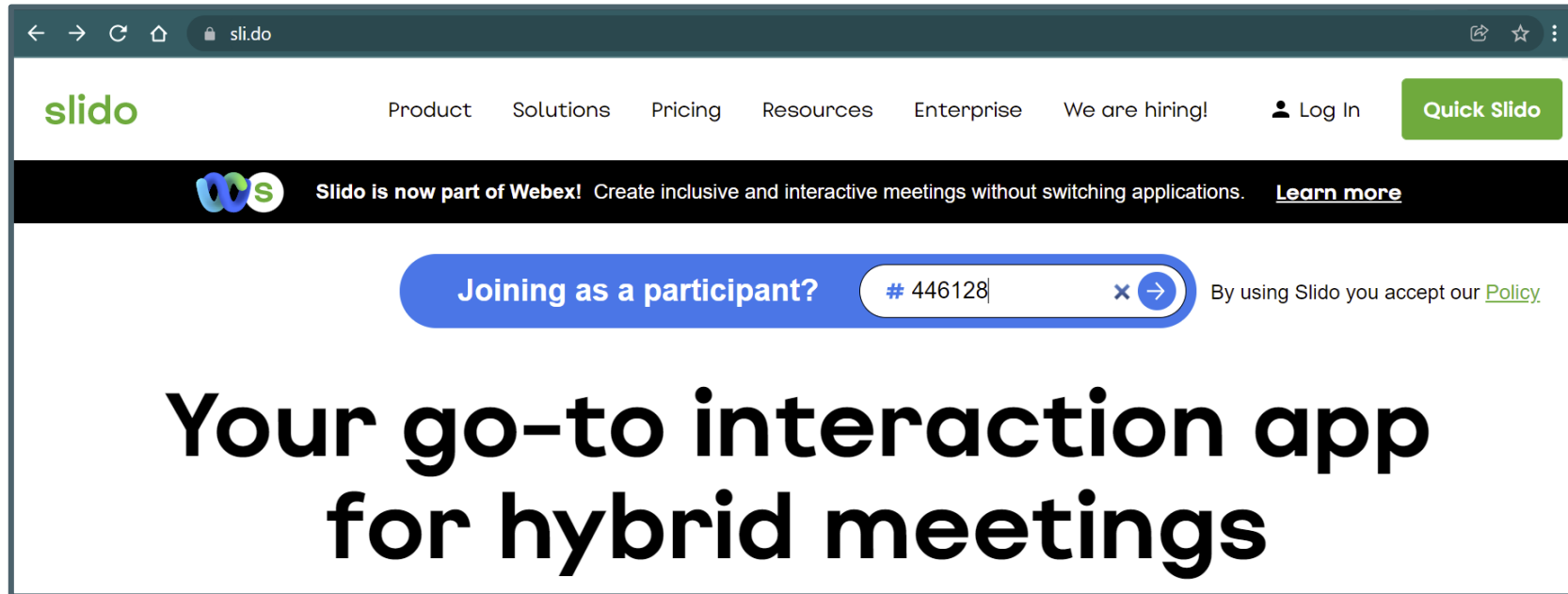
- 30 participants via Zoom, who can interact with trainers
- Many more participants via Twitch: https://www.twitch.tv/elixir_workshops/

Slido: <https://app.sli.do/event/pl9n9alm/live/questions?w=9qyxd>

- All participants can ask questions at **slido.com** with **#446128**

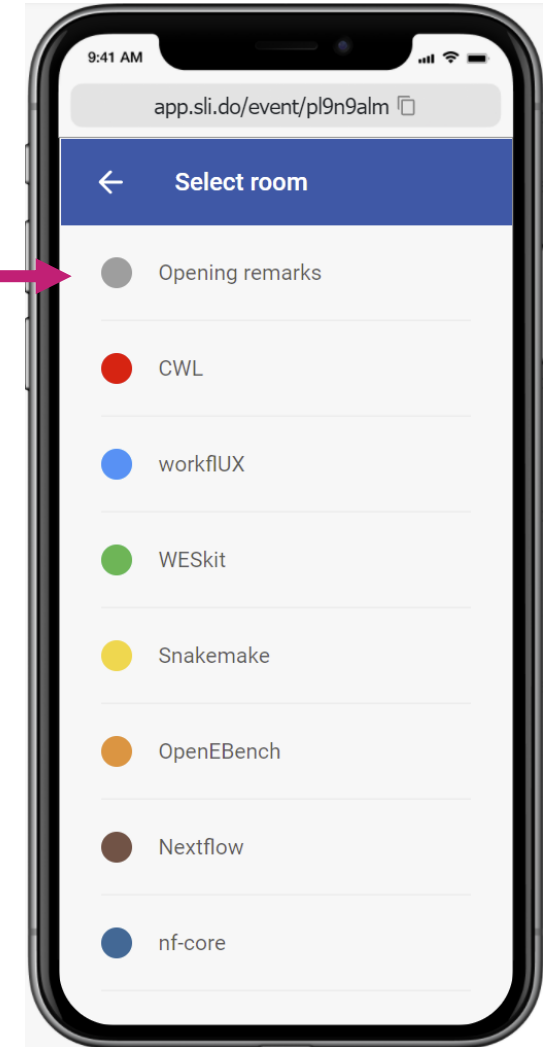
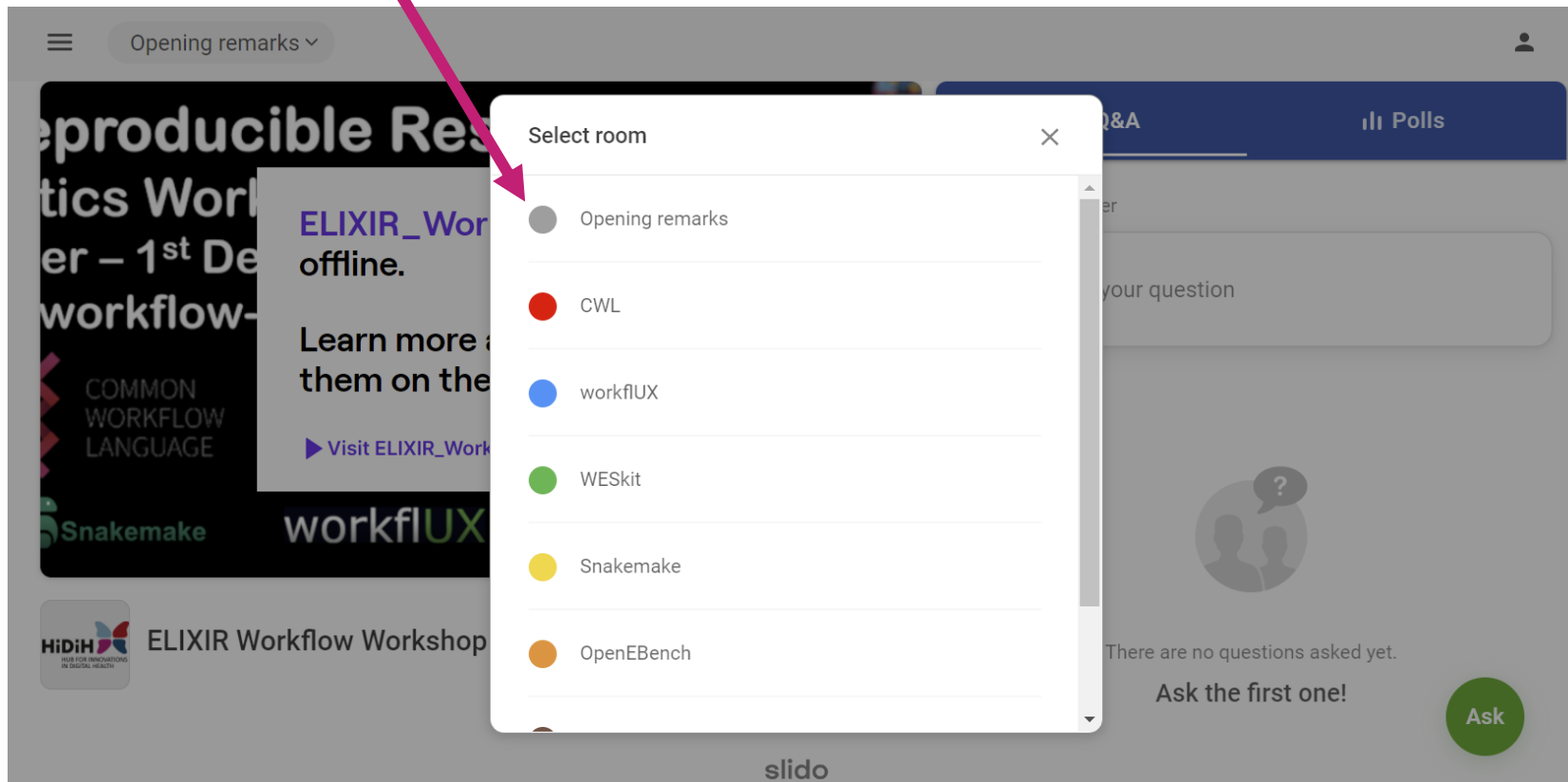
Let's try out slido!

1) Head over to <https://www.sli.do/> and enter “#446128”



Let's try out slido!

- 1) Head over to <https://www.sli.do/> and enter “#446128”
- 2) Select the “Opening remarks” room



Let's try out slido!

- 1) Head over to <https://www.sli.do/> and enter “#446128”
- 2) Select the “Opening remarks” room
- 3) Click on “Polls” and let me know how you are feeling today

Opening remarks ▾

Q&A | **Polls**

Live poll 0 👤

How are you feeling today?

Need more coffee
This will be considered as 1 entry

Excited! 😄 17

Enter another word (optional)

Send

ELIXIR_Workshops is offline.
Learn more about them on their channel!
▶ Visit ELIXIR_Workshops

reproducible Research Workshop
tics Workshop
er – 1st Dec
workflow-
2021/
COMMON WORKFLOW LANGUAGE
Snakemake workflUX OPENEBENCH twitch

HiDiH ELIXIR Workflow Workshop 2021
Hub for Innovations in Digital Health

Live Twitch Stream

9:41 AM

app.sli.do/event/pl9n9alm

Opening remarks ▾

Video | Q&A | **Polls**

Live poll 0 👤

How are you feeling today?

Need more tea
This will be considered as 1 entry

Excited! 17

Enter another word (optional)

Send

Anonymous

slido



How are you feeling today?

ⓘ Start presenting to display the poll results on this slide.

slido



How would you describe your employment?

ⓘ Start presenting to display the poll results on this slide.

slido



Where are you joining from?

ⓘ Start presenting to display the poll results on this slide.

slido



Hand on heart – are you wearing pajamas right now?

ⓘ Start presenting to display the poll results on this slide.

slido



How have you managed reproducible code so far?

ⓘ Start presenting to display the poll results on this slide.

General Etiquette

Please maintain good conduct

Zoom'ers: keep microphones muted unless you want to speak

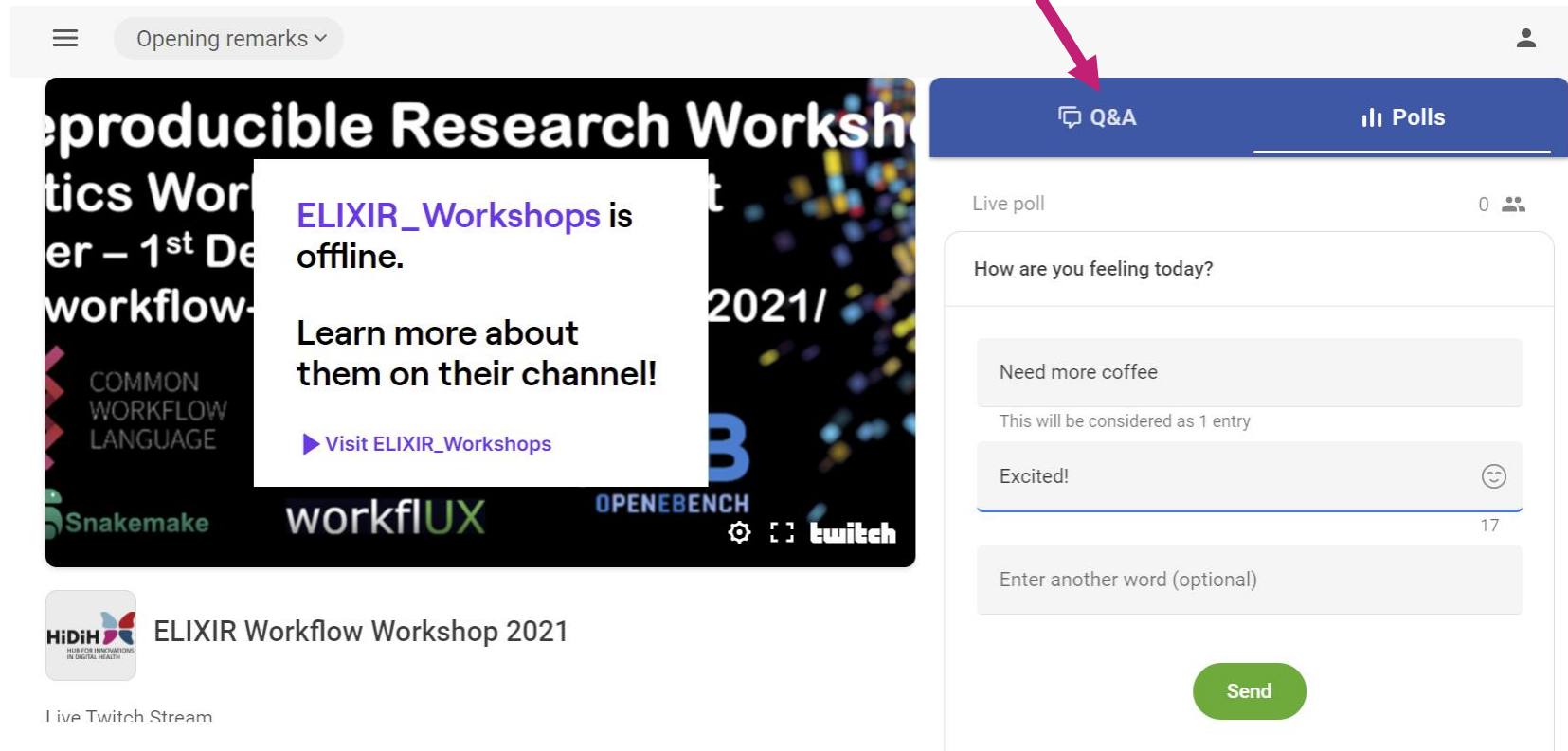
Twitch'ers:

- Note that you have a 5 second delay
- If you are having problems, you can post the question on slido
 - These will not always be answered by the trainers, unless majorly catastrophic
 - Other participants can respond to technical questions

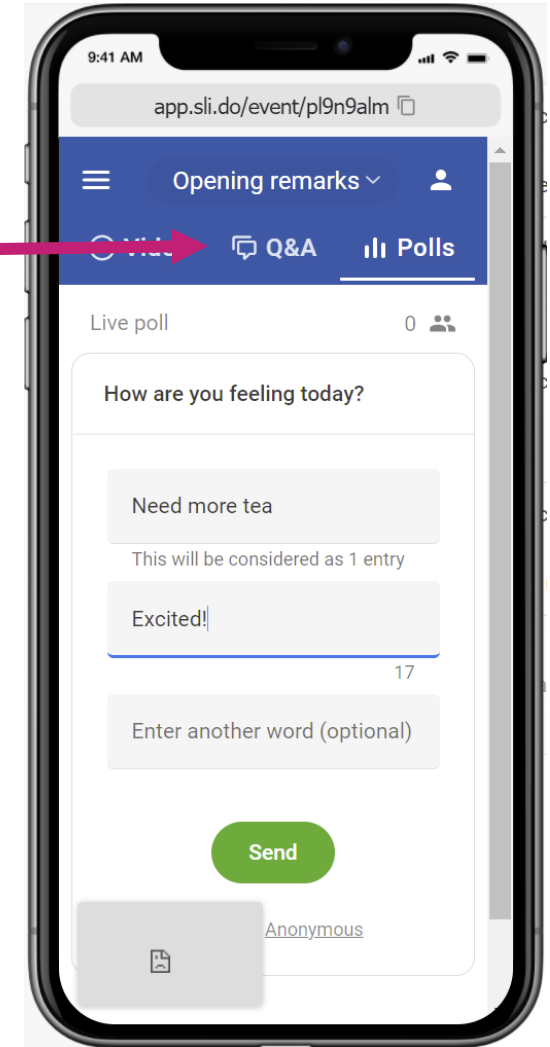
Do you have any questions?

Zoom'ers – raise your hands or use Slido

Twitch'ers – send questions via Slido



The screenshot shows a Twitch stream titled "Reproducible Research Workshop". A white Slido poll overlay is displayed over the video. The poll question is "How are you feeling today?". The poll shows two entries: "Need more coffee" and "Excited!". The poll is titled "Live poll" and has 0 participants. The poll question is "How are you feeling today?". The poll shows two entries: "Need more coffee" and "Excited!". The poll is titled "Live poll" and has 0 participants. The poll question is "How are you feeling today?". The poll shows two entries: "Need more coffee" and "Excited!".



The screenshot shows a mobile Slido app interface. The poll question is "How are you feeling today?". The poll shows two entries: "Need more tea" and "Excited!". The poll is titled "Live poll" and has 0 participants. The poll question is "How are you feeling today?". The poll shows two entries: "Need more tea" and "Excited!". The poll is titled "Live poll" and has 0 participants. The poll question is "How are you feeling today?". The poll shows two entries: "Need more tea" and "Excited!".

Let the show begin!

Day 1: Monday 29th November

- 09:15-09:30 opening remarks
- 09:30-12:00 CWL
- 13:00-14:00 workflUX - The Workflow User eXperience
- 14:00-15:00 WESkit

Day 2: Tuesday 30th Nov

- 09:30-12:00 Snakemake
- 13:00-14:30 OpenEBench
- 18:00-late Evening virtual social via gather.town

Day 3, Wednesday 1st Dec

- 09:30-12:00 Nextflow
- 13:00-15:00 nf-core
- 15:00-15:15 closing remarks