



This sheet is to help guide preparation of the W2D2 videoconference. Please refer to the [Videocons page](#) of the [W2D2 site](#). Vidyo connections are made via the [W2D2 Indico page](#).

Videoconference locations for Moderators:

- CERN, [33-R-16](#)
- Fermilab, WH13XO (Fish Tank)
- CoEPP and Adelaide, determined by moderator

Note: A QuarkNet staff member will connect to each videoconference to assist the moderator.

Videoconference Plan:

Part	Time*	Activity
0	5 min prior to start	Test connections, address problems
1	START	Introductions and Greetings
2	5 min after start	Student comments and questions on measurement
3	10 min after start	Moderators discuss overall results
4	15 min after start	Q&A
5	30 min after start	end

** Times are flexible (except start) and not all videoconferences will take the full 30 minutes.*

Moderators should:

- (Part 0) Arrive at the videoconference room and connect to Vidyo 10 minutes before START time (please see the [schedule](#)). Videoconference equipment should be available there. Bring a laptop anyway.
- (Part 0) Check to be sure each group has a good Vidyo connection. Advise them if their connection is not very good.*
- (Part 1) Introduce yourselves and your location at the start of the videoconference.
- (Part 1) Ask 1-2 warm-up questions of the students. These are questions than can be answered by a show of hands, e.g Had you ever heard of “muons” before World Wide Data Day?
- Ask more questions than make statements.
- Explain when needed but avoid long (>1 min) explanations.

*Typical problems and corrections:

- Echo. Mute microphone when not speaking.
- Too much ambient noise. Ask students to be very quiet and mute microphone when not speaking.
- Cannot hear. Use powered external speakers. Turn them up!
- Cannot be heard. Speakers should be close to microphone.
- Vidyo freezes up. Restart. If problem persists, it may be bandwidth: disable camera, connect by audio only.



Teachers and Tutors should:

- Stop measurement at least 20 minutes before START, even if not all events are done.
- Prepare students before videoconference (see below).
- Connect to Vidyo 5 min before videoconference, work out any connection issues with moderator.
- Organize students for videoconference. Try to enable as many students as possible to participate directly and individually.

Students prepare before videoconference:

- What they found difficult or confusing in the measurement
- Unusual features or events they found
- Questions about the measurement
- Questions about muons and why they focus on them
- Questions about anything else for Q&A in Part 4.

Questions to ask (after showing [combined results](#)):

- Do you see a pattern in values of ϕ ? Why do you think this is?
- Do you see a pattern in values of θ ? Why do you think this is?
- How are the combined results different from the results from your 50 events?

Discuss what happens in the detector when protons collide: where decay products and other particles go, what the limits of the detector are, etc.