Virtual Workshops: Connecting the Dots 2020

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What is Connecting the Dots

- The Connecting The Dots workshop series brings together experts on track reconstruction and other problems involving pattern recognition in sparsely sampled data.
- The CTD scientific program is nominally 2.5 days with a fully plenary format
 - Three types of presentations: Plenary talks; Young-scientist talks; Posters
 - We were expecting about 80 people to attend CTD in April 2020



CTD2020 Calendar

CTD start (20th)

Abstract deadline (20th)

Scientific program announced (23th)

December 2019

January 2020

February 2020

March 2020

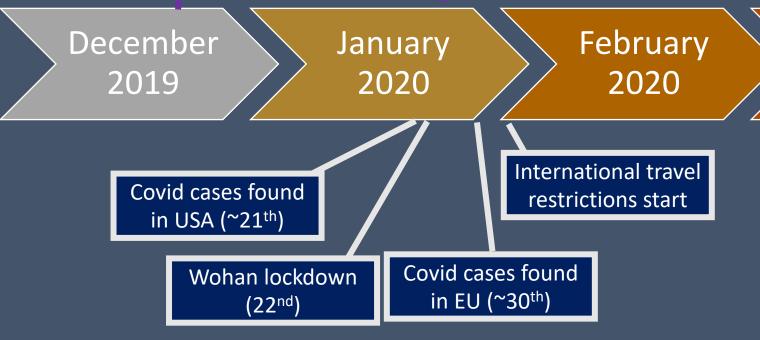
April 2020

CTD2020 Calendar

CTD start (20th)

Abstract deadline (20th)

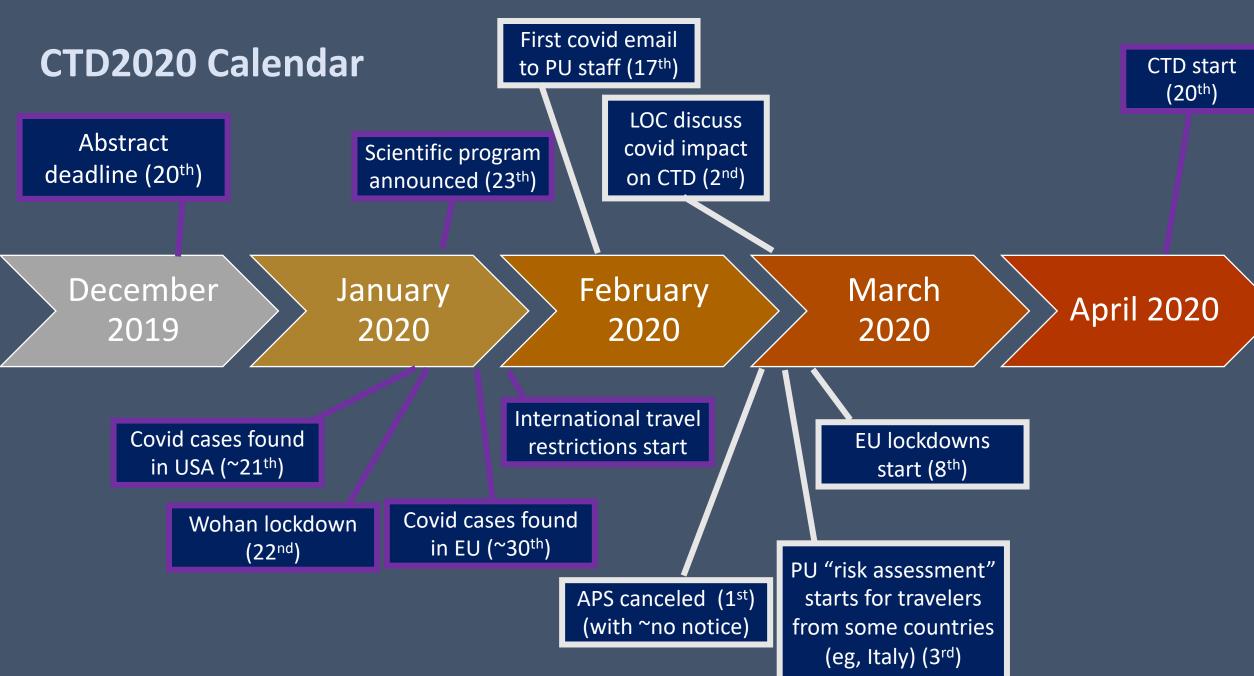
Scientific program announced (23th)



> April 2020

March

2020



CTD2020 Calendar

First covid email to PU staff (17th)

CTD start (20th)

Abstract deadline (20th)

Scientific program announced (23th)

LOC discuss covid impact on CTD (2nd)

Virtual timetable published (19^{th)}

PU cancels events

until June (13th)

December 2019

January 2020

February 2020

March 2020

CTD goes

virtual (10th)

April 2020

Covid cases found in USA (~21th)

Wohan lockdown (22nd)

International travel restrictions start

Covid cases found in EU (~30th)

APS canceled (1st) (with ~no notice)

EU lockdowns start (8th)

PU "risk assessment" starts for travelers from some countries (eg, Italy) (3rd)

Going virtual - Constraints and desires

- Once it was clear that an in person event was not possible, the local organizers and international committee were both strongly in favor of a virtual conference rather than no conference
 - We did reach out to several groups that had organized around approaches to virtual meetings for ideas and help
- We had ~10 days figure out the approach
 - We had already accepted abstracts, etc so our speakers needed to know how/what/when to prepare
 - Meeting (and life) schedules were uncertain
- Wanted to preserve
 - The full scientific program as planned for the in-person meeting talks and posters
 - The planned length of oral presentations
 - The planned opportunities for interacting with all presenters (oral and poster)

Going virtual – Constraints and desires

- We judged it to be not possible to schedule the entire scientific program during the overlap between the EU extended-working day and the US extended-working day
 - We had ~no abstracts from Asia, so we did not prioritize other time zones
- We felt we had limited flexibility in rescheduling as speakers needed time to get results approved (eg, could not move presentations forward)
 - The workshop was small enough that we had some freedom to reschedule as to accommodate the needs of a virtual meeting
 - However, talks submitted by "an experiment" experienced some communication gaps. The experiment conference teams were also having to get use to "virtual" conferences
- Positive note: We did not lose any contributions due to switching to a virtual meeting

Our solution

- Two main program components
 - "Recording sessions" outside of "prime time" with audience and small window for Q+A
 - Videos available for 1+ week for viewing
 - Dedicated Q+A sessions in "prime time"

- What about posters?
 - Insufficient time to converge on a "creative" solution. As posters had essentially all been proposed as talks, we just promoted them to short talks.

Implementation: Recording sessions

- Approach: Six 3-hour sessions spread over 3 days
 - Early afternoon CERN time (1300 GVA, 0700 Princeton)
 - Evening CERN time (1900 GVA, 1300 Princeton)
 - Recordings done via ZOOM; and recorded to ZOOM Cloud (Princeton had this service already available for us to use)
 - Asked speakers to share their video while speaking if they could (90% could)
 - Raising hands worked for audience participation
 - Timetable in Indico; slides uploaded to Indico
- Results: Worked smoothly
 - Reasonable audience (~20 people on average) for all sessions
 - Essentially all speakers stayed on time;
 - ZOOM worked without problems.
 - Cloud recording meant that we didn't depend on any one local computing infrastructure always working, and nor did we need to have N people recording each session (and it was automatic)
 - Each session recording had a different resolution/aspect ratio. It is not clear why
 - Typically 1-3 questions per speaker. We cut off discussion as needed, knowing there
 was a Q/A session to follow

Implementation: Recordings

- Recordings available on ZOOM cloud about 1 hour after recording session ended
- Developed scripts to splice recording session into individual talks, add CTD graphic and title to the beginning of each contribution [done via ffmpeg+python]
- Recordings up on indico and youtube before next recording session started (partly thanks to having a fiber connection to upload content...)
 - YouTube upload was automated; however, we did not buy the needed Youtube API quota to be able to upload all videos automatically each day. So most done by hand..
- A Mattermost was set up for each talk for questions/interaction based on recording

Outcomes:

- Did anyone watch these recordings? Clearly yes; however no concrete viewing statistics on indico uploads.
- The Mattermost went essentially unused -> An integrated system for interactivity is important

Implementation: Q/A sessions one week later

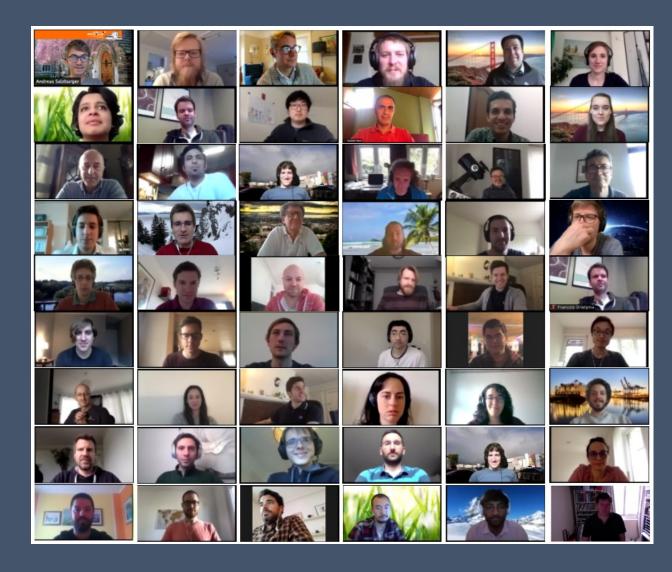
- Three 2-hour sessions during EU/USA extended working day (1600 GVA). These were also recorded and uploaded.
- Each speaker had a 1 minute / 1 slide introduction to their talk to get the discussion started

Comments:

- Good attendance; however the discussion was largely driven by a few "experts".
 - I see this issue affecting many ZOOM meetings...
- The short introduction to each talk worked well. Speakers followed the format and generally successfully conveyed the important conclusions of their work.
- We did eventually have a problem with our ZOOM usage the host left the meeting without appointing a new host; the new host left and "ended the meeting for all".. We recovered by rescheduling a few affected speakers for the next day
- Indico timetables do not handle events without events every day very well.
 - Days without contributions are shown in the agenda

Remembering and thanking our attendees

- Using Indico's registration system to give out the ZOOM coordinates means that we do have a good record of attendees
 - 200 registered, clearly less than that attended
 - We did not attempt to track who attended what (just like we would not have done so in a physical workshop)
- Our approach to a workshop photograph:
 - Multiple zoom screenshots over multiple days (still not getting everyone that attended – maybe 50%?)
 - Sent images through a splicing tool
 - Identified and removed duplicates
 - Recombined into one image



Wrapup

- CTD2020 became a virtual meeting just a month before it was held.
 - The organization happened very much "on the fly". Even Zoom was pretty novel meetings in the LHC community at the the time.
 - We found an audience preference towards real-time interactivity rather than recordings
 - The Earth is still round, so this is a challenge for even 2 continents as virtual attendees tend not to be only following your workshop as they might have in person.
 - Free/open discussion was clearly more difficult in virtual setting. Perceived higher barrier to speaking up and coffee/lunch/evening discussion time is lost.
- Sidebar on going back to physical events. Both organizers and attendees face financial risks leading up to conferences
 - We did not consider the potential impact of up-front cost commitments when planning CTD2020.
 - Fortunately
 - We picked a registration system without fees if you canceled your event (Eventbrite)
 - We made a hotel booking that did not charge guests to cancel ahead of time.
 - Aside from the conference hotel, we were using on-campus venues (and have a great local team that dealt with all the scheduling/cancelation issues that came up)
 - The next 6 months is also a good opportunity to think about best-practices for in-person event organization (often it's the first time being an organizer as it was for us).