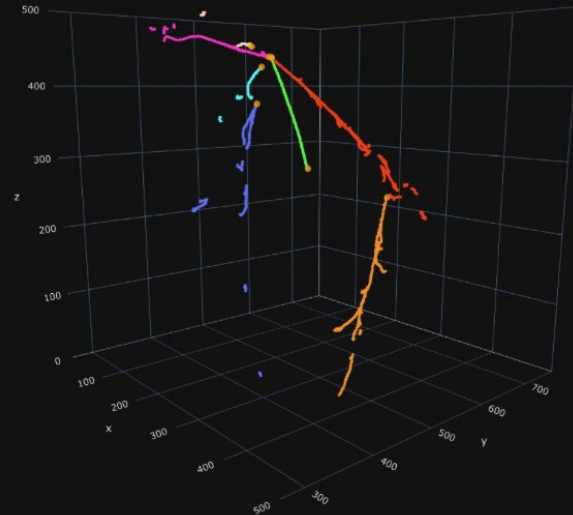
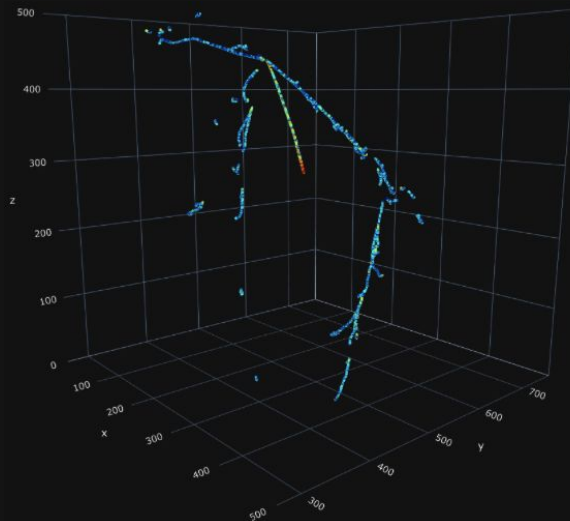


# Neutrino Physics and Machine Learning

## Nu-2020 Satellite Workshops



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# NPML Workshop

## Welcome

Thanks for joining! We would like to see more opportunities to gather around Machine Learning (ML) and related topics for the neutrino physics community. This is an attempt to initiate a workshop.

- ~ 160 registrations from > 10 countries!
  - Virtual workshop inflation (~60 people on slack), still great interest :)
- Please tell us about your research!
  - Individual/collaboration talks invited at the main workshop
  - We invite research talks related to optimization methods, emerging statistical/probabilistic inference techniques, and machine learning applications in neutrino physics (what did we miss?)

# NPML Workshop

## Welcome

Thanks for joining! We would like to see more opportunities to gather around Machine Learning (ML) and related topics for the neutrino physics community. This is an attempt to initiate a workshop.

### **NPML workshop** ([indico link](#))

**Goal:** survey the current + form the future vision of the ML techniques R&D for maximizing the impact on the science output.

### **NPML Lightning Talks / Nu2020 Satellite** ([indico link](#))

**Goal:** promote young researchers to give a technical talk on their ML related research projects = important inputs to the main workshop.

# NPML Lightning Talks

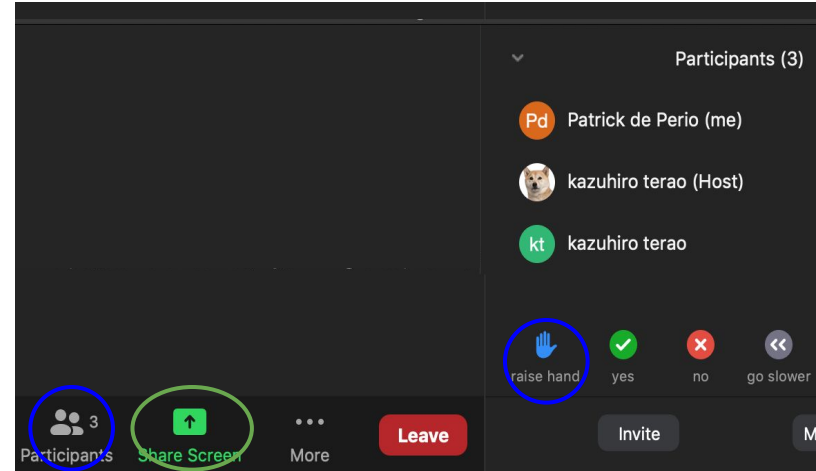
## Agenda

- Zoom meeting ([link](#), password 550998)
  - Stay in the room during the breaks for networking
  - Want a topical breakout room during a break? Let us know!
- June 17th + 19th (Wednesday + Friday) to cover 21 talks.
  - 10:30 - 14:30 CT, morning + afternoon sessions each day
  - Two conveners moderate each session
- Each talk 10 minutes + 5 minutes for questions

# NPML Lightning Talks

## Question/Talk policy

- Speakers:
  - Please introduce yourself first
  - If possible w/ video-on!
  - Be ready to **share screen!**
- Audience:
  - One mic - **raise hand** for questions!
  - Unmute after you are called upon by a convener
  - Question only accepted after a speaker finishes his/her talk
  - Alternatively ask questions on the Slack channel **#workshop-questions**. Upvote a good question (:thumbsup:)!



# NPML Lightning Talks

## Competitions

- Two competitions
  - Best Lightning Talks (BLT)
  - Best ML Poster (BMLP)
  - Both will be mentioned in the NPML main workshop
    - BMLP to be mentioned in the Neutrino 2020 as well
- During the close-out, we distribute/open a survey to vote for the best talks/posters for 1 week. Please participate!

# Have fun!

## Advertisement

Our sibling workshops/conferences in near future

- **Inter-experimental groups:** [WatChMaL](#), [DeepLearnPhysics](#), [Exa.Trk.](#)
- **Workshops**
  - **Reconstruction & ML for Neutrino Experiment**
    - [Last one](#) inspired this workshop, the next one in 2021
  - **DANCE ML Workshop**
    - Happening virtual in this August ([indico](#))!
  - ... and more in other HEP frontiers
    - IML, ACAT, summer schools (CoDaS-HEP, HEP-ML, etc.)
  - Want more?
    - HEP Cross-frontier workshops? Beyond HEP? Lectures/tutorials?