There has been a recent surge of interest in developing and applying advanced machine learning techniques in HEP and jet physics. The goal of this workshop is to gather experts and newcomers to discuss progress, new ideas, and common challenges. The workshop is open to the community; we invite contributions and will try to accommodate everyone within reason.

There is no fee for attending the workshop. Coffee and light refreshments will be provided during breaks but meals and lodging are the responsibility of the attendant.

There are many hotels in the Berkeley area, including limited availability at the LBNL guesthouse (5 min walk from the workshop, $140/night). A complementary shuttle runs every 10 min from downtown Berkeley up to the lab. For lunches, the most convenient option will be to eat in the LBNL cafeteria (5 min walk from workshop, ~$10).

Related workshops:
- DSGHEP: https://indico.fnal.gov/conferenceDisplay.py?confid=13417
- Boost: https://indico.cern.ch/event/179660/

Machine learning has become a hot topic in particle physics over the past several years. In particular, there has been a lot of progress in the area of particle and event identification, reconstruction, fast simulation and others. One significant area of research and development has focused on jet physics. In this workshop, we will discuss current progress in this area, focusing on new breakthrough ideas and existing challenges. The ML4Jets workshop will be open to the full community and will include LHC experiments as well as theorists and phenomenologists interested in this topic.

For last year's workshop, please see https://indico.physics.lbl.gov/indico/event/546/.

Chairs:
- Sergei Gleyzer (U Florida)
- Ben Nachman (LBNL)

Organizing Committee:
- Pushpa Bhat (Fermilab)
- Kyle Cranmer (NYU)
- Sergei Gleyzer (U Florida)
- Ben Nachman (LBNL)
- Tillman Plehn (Heidelberg)

Local Organizing Committee:
- Gabriele Benelli (Brown U)
- Javier Duarte (Fermilab)
- Benjamin Kreis (Fermilab)
- Nhan Tran (Fermilab)
- Justin Pilot (UC Davis)

LPC Event Committee Chairs:
- Gabriele Benelli (Brown U)
- Benjamin Kreis (Fermilab)

LPC Coordinators:
- Cecilia Gerber (UIUC)
- Sergio Jindariani (Fermilab)
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This workshop follows successful workshops in 2017 and 2018.

Registration is now closed - please email the organizing committee if you are still interested in attending the workshop in person.

International Organizing Committee:
Kyle Cranmer (NYU), Ben Nachman (LBNL), Maurizio Pierini (CERN), Tilman Plehn (Heidelberg), Jesse Thaler (MIT)
Registration
08:30 - 09:00

Introduction
Ben Nachman, Tilman Plehn
09:00 - 09:30

Coffee break
09:00 - 10:40

Architectures
Matthew Schwartz, Tai-Chi Cheng
10:40 - 11:10

KA 802, Kimmel Center for University Life

Lunch
11:10 - 12:00

Generative Models
Jana Schaerschmidt, Martin Endmann
12:00 - 13:00

KA 802, Kimmel Center for University Life

Anomaly detection (LHCO)
David Shih, Gregor Kasiezka
13:00 - 14:00

KA 802, Kimmel Center for University Life

Coffee break
14:00 - 15:00

KA 802, Kimmel Center for University Life

KA 802, Kimmel Center for University Life
15:00 - 16:00

KA 802, Kimmel Center for University Life

Coffee break
16:00 - 17:00

KA 802, Kimmel Center for University Life

KA 802, Kimmel Center for University Life
17:00 - 17:30

KA 802, Kimmel Center for University Life

Decoration and Semi/Unsupervised approaches
Chase Owen Shimmin, Nhan Viet Tran
09:00 - 11:00

KA 802, Kimmel Center for University Life

KA 802, Kimmel Center for University Life
11:00 - 11:30

ML Beyond HEP
Kyle Stuart Cranmer
11:30 - 13:00

KA 802, Kimmel Center for University Life

KA 802, Kimmel Center for University Life
13:00 - 14:00

KA 802, Kimmel Center for University Life

KA 802, Kimmel Center for University Life
14:00 - 15:00

KA 802, Kimmel Center for University Life

KA 802, Kimmel Center for University Life
15:00 - 16:10

KA 802, Kimmel Center for University Life

KA 802, Kimmel Center for University Life
16:10 - 17:30
Thursday before lunch

Jonathan Niles-Weed

Kyunghyun Cho
Friday we are on 9th floor in room 914
Want an inclusive, welcoming environment.
Harassment will not be tolerated.
We will abide by IRIS-HEP CoC.
Complaints can be sent to any of the organizers.

1. **Be friendly and patient.**

2. **Be welcoming.** We strive to be a community that welcomes and supports people of all backgrounds and identities. This includes, but is not limited to, members of any race, ethnicity, culture, national origin, color, immigration status, social and economic class, educational level, sex, sexual orientation, gender identity and expression, age, physical appearance, family status, technological choices, academic discipline, political views, religion, mental ability, and physical ability.

3. **Be considerate.** Your work will be used by other people, and you in turn will depend on the work of others. Any decision you take will affect users and colleagues, and you should take those consequences into account when making decisions. Remember that we’re a world-wide community. You may be communicating with someone with a different primary language or cultural background.

4. **Be respectful.** Not all of us will agree all the time, but disagreement is no excuse for poor behavior or poor manners. We might all experience some frustration now and then, but we cannot allow that frustration to turn into a personal attack. It’s important to remember that a community where people feel uncomfortable or threatened is not a productive one. Respect the work of others. We recognize the acknowledgment/citation requests of the original authors. As authors, we are explicit about how we want our own work to be cited or acknowledged.

5. **Be careful in the words that you choose.** Be kind to others. Do not insult or put down other community members. Harassment and other exclusionary behavior are not acceptable. This includes, but is not limited to:
   - Violent threats or violent language directed against another person
   - Discriminatory jokes and language
   - Posting sexually explicit or violent material
   - Posting (or threatening to post) other people’s personally identifying information (“doxing”)
   - Personal insults, especially those using racist or sexist terms
   - Unwelcome sexual attention
   - Advocating for, or encouraging, any of the above behavior
   - Repeated harassment of others. In general, if someone asks you to stop, then stop.

6. **When we disagree, try to understand why.** Disagreements, both social and technical, happen all the time and the IRIS-HEP community is no exception. Try to understand where others are coming from, as seeing a question from their viewpoint may help find a new path forward. And don’t forget that it is human to err: blaming each other doesn’t get us anywhere, while we can learn from mistakes to find better solutions.

7. **A simple apology can go a long way.** It can often de-escalate a situation, and telling someone that you are sorry is an act of empathy that doesn’t automatically imply an admission of guilt.
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Map of lunch spots etc.
STATEMENT OF PURPOSE:

This document provides information about the ML4Jets2020 conference, which took place from 15-17 January 2020 at the Kimmel Center for University Life in New York City.

ACCOMMODATION, INTERNET:

There are nearly endless hotels in NYC, near the venue:

- Kimmel Center for University Life
- 60 Washington Square S, New York, NY 10012

https://goo.gl/maps/79Z2F6rNg42

We do not have a reserved block at any particular hotel, but there are a range of options available with a wide range in price.

WIFI ACCESS:

1. Wi-Fi Name: nyuguest/nyuguest-legacy
2. Open Web browser (Internet Explorer, Google Chrome, Firefox, etc.) and go to any webpage. The browser will automatically redirect to the nyuguest login page.
3. Log in with the credentials shown below

   Guest ID: guest130
   Password: gnasopof

   (or eduroam)
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**Map of lunch spots etc.**

**Starts** 15 Jan 2020, 08:30
**Ends** 17 Jan 2020, 19:00
America/New_York

There are no materials yet.
DINNER TONIGHT

Tonight 7-9 pm

$50 Open Grill with unlimited

BEER & WINE

ANGUS BURGERS
TURKEY BURGERS
PULLED PORK SANDWICHES
PORTOBELLO MUSHROOM SANDWICHES
VEGGIE BURGERS

BRATWURST
ARGENTINIAN BRATWURST
WEISSWURST
EASTER SAUSAGE

PEA & CARROT LATKES
SPRING SALAD
RADEGAST HALL: 30 MIN. (ACE) TO THE L

ML4Jets 2019
ATLAS S&C Week June 2019 at NYU
32 views

All changes saved in Drive
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THANKS TO OUR SPONSORS

PDT has former HEP physicists and has supported workshops

https://www.pdtpartners.com

https://iris-hep.org
ML4Jets2020

15-17 January 2020
Kimmel Center for University Life
America/New_York timezone

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