

**Session Program**

**14-16 Nov 2018**

**Machine Learning for Jet Physics**

***Representing Jets (Chairs: Mauro Verzetti and  
David Shih)***

Fermilab, One West (WH1W)

# Thursday 15 November

09:00

## Representing Jets (Chairs: Mauro Verzetti and David Shih)

Session | Location: Fermilab, One West (WH1W)

09:00–09:30 **Introduction and overview (20'+10')**

**Speaker**  
David Shih

09:30–09:55 **Energy Flow Networks: Deep Sets for Particle Jets (20'+5')**

**Speaker**  
Patrick Komiske

10:00–10:25 **Jet as a particle cloud (20'+5')**

**Speaker**  
Huilin Qu

10:30–10:55

**Spectral Analysis of Color Charge in Two-Prong Jets with Neural Networks (20'+5')**

**Speaker**  
Sung Hak Lim

11:00–11:25

**ML@QCD efforts in Sherpa: shower variations and phase-space sampling (20'+5')**

**Speaker**  
Enrico Bothmann

11:30

13:00

## Representing Jets (Chairs: Mauro Verzetti and David Shih)

Session | Location: Fermilab, One West (WH1W)

13:00–13:25 **Quarks vs. Gluons for Higgs->invisible searches (20'+5')**

**Speaker**  
Jennifer Thompson

13:30–13:55

**Top tagging with Lorentz Boost Networks and simulation of electromagnetic showers with a Wasserstein GAN (20'+5')**

**Speaker**  
Yannik Alexander Rath

14:00