

2019 CTEQ School

The Coordinated Theoretical-Experimental Project on QCD (CTEQ)
will organize and conduct the

2019 CTEQ School

on

QCD and Electroweak Phenomenology

at the

University of Pittsburgh, PA, USA

16-26 July 2019

The school will be locally hosted by **PITT PACC**, and the Monte Carlo Tutorial Sessions will be organized with the cooperation of the **MCnet Collaboration**.



The School is ideally suited for advanced graduate students and recent PhDs.

Topics to be covered:

Focused Introductory Reviews:

- Introduction to the Parton Model & Perturbative QCD
- Deeply Inelastic Scattering
- Vector Bosons / Direct Photons
- High Energy Jets
- Heavy Quarks
- Neutrinos

In-depth Analysis and Tutorials:

- Machine Learning Techniques & Tutorial**
- Monte Carlo Introduction & Tutorial**
- Higgs at Hadron Colliders
- Experimental Results from QCD/EWK/Top
- PDFs and Global Fits
- Dark Matter
- The Standard Model and Beyond

Review of Applications Begins: 1 March 2019

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Sponsors: U.S. Department of Energy, National Science Foundation, Fermi National Accelerator Laboratory, MCnet, Pittsburgh Particle physics, Astrophysics, & Cosmology Center (PITT PACC)

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