

# 2022 CTEQ School

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

## 2022 CTEQ School

on

## QCD and Electroweak Phenomenology

at the

University of Pittsburgh, PA, USA

06-16 July 2022

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  
Neutrinos

### In-depth Analysis and Tutorials:

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

---

**Review of Applications Begins: 31 March 2022**

Website: [www.cteq.org](http://www.cteq.org)

E-mail: [cteq.school@gmail.com](mailto:cteq.school@gmail.com)

---

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

Organizers: Brian Batell, Tao Han, Joni George, Ken Hatakeyama, Stefan Hoeche, Joey Huston, Cynthia Keppel, Huey-Wen Lin, Jorge Morfin, Pavel Nadolsky, Fred Olness, Paul Reimer, Ingo Schiengein, Dave Soper, George Sterman, Zack Sullivan, Doreen Wackerroth