# **2017 CTEQ School**

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

2017 CTEQ School

on

## **QCD** and **Electroweak Phenomenology**

at the

University of Pittsburgh, PA, USA 18 – 28 July 2017

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
Monte Carlo Introduction
Deeply Inelastic Scattering
Higgs at Hadron Colliders
Vector Bosons / Direct Photons
High Energy Jets
Heavy Quarks

#### **In-depth Analysis and Phenomenology:**

Monte Carlo Tutorial

Experimental Results from LHC

QCD/EWK/Top at Hadron Colliders

PDFs and Global Fits

The Intensity Frontier: Neutrino & Muon Physics

**EIC & Related Topics** 

The Standard Model and Beyond

NLO/NNLO Computation & Matching/Merging

### **Review of Applications Begins: 1 March 2017**

Website: www.cteq.org E-mail: 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, Cindy Cercone, Tao Han, Ken Hatakeyama, Stefan Hoeche, Joey Huston, Cynthia Keppel, Tom LeCompte, Jorge Morfin, Pavel Nadolsky, Fred Olness, Jeff Owens, Dave Soper, Zack Sullivan, Nikos Varelas