

# USQCD DEI activities

Will Detmold, MIT

# Traineeship PIs

§ Workforce in HEP Computing Snowmass2013 recommendation

∞ Majority of funding goes to experimental efforts/programs

∞ Lattice proposal: take advantage of the USQCD network

§ High Energy Physics Computing Traineeship for Lattice Gauge Theory (LGT4HEP)



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(PI)



Ethan Neil



Andreas Kronfeld



Chulwoo Jung



Peter Boyle (collaborator)

All the credit should go  
to Huey-Wen!!

# High Energy Physics Computing Traineeship for Lattice Gauge Theory (LGT4HEP)

Interested in becoming a leader in the next generation of high-performance computing for theoretical physics research?

**Learn from the best:** Be trained by world-renowned experts in high-performance computing and lattice gauge theory.

**Gain hands-on experience:** Work on cutting-edge research projects using state-of-the-art computing resources and internship opportunities at DOE national labs.

**Make a difference:** Help push the boundaries of our understanding of the universe and develop the next generation of high-performance computing technologies.



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## Apply now:

Visit [lgt4hep.github.io](https://lgt4hep.github.io) to learn more and where to apply for the traineeship graduate school program.



# FY24 Traineeship Students

<https://lgt4hep.github.io/Students.html>

**Bill Good (he/him)**  
Michigan State University



**Ryan Abbott**  
MIT



**Jonas Hildebrand**  
University of Connecticut

**Jake Sitison**  
University of Colorado, Boulder



## § News:

☞ Bill is awarded with MSU great IDEA fellowship

§ These students are still early in their career stage. We look forward to many great things from them in the future

# Traineeship Courses

<https://lgt4hep.github.io/Courses.html>

## § Fundamental Courses

- Graduate-Level Computational Physics (should cover at least Python, C++, algorithms)
- Parallel Computing (in C or C++)
- Quantum Field Theory I (and relevant prerequisites)

## § Lattice-QCD Training

- Course: Complete two semesters of lattice-QCD training with knowledge and hands-on experience
- Internship at national lab

Course will be student-driven and open to all

## § Summer School

- Attend existing summer schools that are already funded by DOE and NSF to further advance their background in HEP and computing topics.

# Traineeship Program

- § Successful completion of the traineeship program will require trainees to complete the following goals (2 years)
- ∞ A minimum of 9 credit hours in relevant coursework, including one semester of quantum field theory and one semester of HPC
  - ∞ Attendance at a minimum of one relevant summer school, workshop, or other training event, such as a hackathon
  - ∞ Satisfactory completion of course materials developed specifically for this program
  - ∞ Completion of a research experience in lattice field theory at a DOE national lab, under the supervision of a lab-based mentor



# LGT4HEP

Please advertise to  
undergrads you know  
who might be interested!



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# DEI in funding renewals

- New DOE proposal for LQCD project (HEP) and NPPLCI (NP) submitted a few weeks ago and are being reviewed in May
- Plan for Promoting Inclusive and Equitable Research (PIER plan)
  - Focus on activities built around USQCD infrastructure
  - Access to USQCD hardware through junior investigator track
  - Travel \$\$\$ for summer student visits to USQCD host labs
  - Support of project staff to coordinate DEI/outreach efforts amongst USQCD members



# USQCD Committee on DEI

- USQCD CDEI formed in 2020
- Current members have been on it since inception: K. Cushman, W Detmold, A. El Khadra, R. Edwards (ex officio), J. Giedt, H.-W. Lin
- Less active in the last year
- New members needed - please send me an email to volunteer