

# PROF. ETHAN THOMAS NEIL

## Biographical Sketch

Department of Physics  
University of Colorado  
2000 Colorado Avenue  
Boulder, CO 80309-0390

Voice: (303) 492-0513  
E-mail: ethan.neil@colorado.edu

### Professional Preparation

Duke University, Durham, NC	B.S. in Physics and Mathematics, 2005
Yale University, New Haven, CT	M.S. in Physics, 2007
Yale University, New Haven, CT	Ph.D. in Physics, 2011
Fermi National Accelerator Laboratory, Batavia, IL	Research Associate, 2010-2013

### Appointments

Fermi National Accelerator Laboratory, Batavia, IL	Research Associate	2010-2013
RIKEN Brookhaven Research Center, Upton, NY	RIKEN Fellow	2013-2018
University of Colorado, Boulder, CO	Assistant Professor	2013-present

### Selected Publications

- Thomas Appelquist *et al.* (LSD Collaboration). “Nonperturbative investigations of SU(3) gauge theory with eight dynamical flavors”. **Phys. Rev. D****99**:1, 014509 (2019).
- Andrea Carosso, Anna Hasenfratz and Ethan T. Neil. “Nonperturbative Renormalization of Operators in Near-Conformal Systems Using Gradient Flows.” **Phys. Rev. Lett.** **121**:20, 201601 (2018).
- Venkitesh Ayyar, Thomas DeGrand, Daniel C. Hackett, William I. Jay, Ethan T. Neil, Yigal Shamir and Benjamin Svetitsky. “Baryon spectrum of SU(4) composite Higgs theory with two distinct fermion representations.” **Phys. Rev. D****97**:11, 114505 (2018).
- Bipasha Chakraborty *et al.* (Fermilab Lattice/HPQCD/MILC Collaborations). “Strong-Isospin-Breaking Correction to the Muon Anomalous Magnetic Moment from Lattice QCD at the Physical Point”. **Phys. Rev. Lett.** **120**:15, 152001 (2018).
- Graham D. Kribs and Ethan T. Neil. “Review of strongly-coupled composite dark matter models and lattice simulations.” **IJMPA** **31**:22, 1643004 (2016).
- Thomas Appelquist *et al.* (LSD Collaboration). “Detecting Stealth Dark Matter Directly through Electromagnetic Polarizability.” **Phys. Rev. Lett.** **115**:171803 (2015).
- Matthew R. Buckley, Dan Hooper, Joachim Kopp, Ethan T. Neil. “Light  $Z'$  Bosons at the Tevatron.” **Phys. Rev. D****83**:115013 (2011).
- Thomas Appelquist, George T. Fleming, Ethan T. Neil. “Lattice study of the conformal window in QCD-like theories.” **Phys. Rev. Lett.** **100**:171607, 2008. Erratum-ibid. 102:149902 (2009).