Landon Lehman

CONTACT INFORMATION

Department of Physics
University at Buffalo
259 Fronczak Hall
Buffalo, NY 14260

Phone: 574-807-9129
E-mail: landonle@buffalo.edu

EDUCATION

University of Notre Dame, Notre Dame, IN

Ph.D., Physics, 2017

M.S., Physics, 2015

Adviser: Adam Martin

Purdue University, West Lafayette, IN

B.S., Physics, 2012

Minor in Mathematics

Vincennes University, Vincennes, IN

Enrolled in Chemistry and Secondary Science Ed. progams

Transferred to Purdue University in 2010

PROFESSIONAL RECORD

January 2017 to May 2017: Adjunct Instructor, University at Buffalo, Buffalo, NY

June 2017 to present: Clinical Assistant Professor, University at Buffalo, Buffalo, NY

August 2017 to present: Physics Teacher, Chesterton Academy of Buffalo

COURSES TAUGHT

PHY102 College Physics II: A 4-credit algebra-based introductory course covering topics in electricity and magnetism, light, optics, and modern physics. I taught two sections in Spring 2017 with a combined enrollment of 329 students, and I am currently (Spring 2018) teaching one section with 196 students.

PHY101 College Physics I: A 4-credit algebra-based introductory course covering mechanics, heat, waves, and sound. I taught two sections in Fall 2017 with a combined enrollment of 300 students.

PHY307 Modern Physics Lab: A 2-credit upper-level undergraduate lab course, covering 11 experiments in modern physics, ranging from nuclear physics to semiconductors. I taught this course in Fall 2017 with an enrollment of 10 students.

Physics GRE Prep Course: An experimental course that I taught in Fall 2017. It was an informal course, with the goal of preparing physics majors to perform to the best of their abilities on the Physics GRE exam.

PHY107 General Physics I: A 4-credit calculus-based introductory course covering kinematics, Newton's laws, energy, momentum, rotational motion, and oscillations. I

am currently (Spring 2018) teaching one section with 234 students.

PHY207 General Physics III: A 4-credit calculus-based course covering sound waves, electrogmagnetic waves, geometrical and physical optics, and modern physics. I am currently (Spring 2018) teaching one section with 167 students.

Publications

[1] Landon Lehman and Adam Martin. "Low-derivative operators of the Standard Model effective field theory via Hilbert series methods." `arxiv:1510.00372`. Journal of High Energy Physics, Volume 2016, Issue 2. doi: 10.1007/JHEP02(2016)081.

[2] Landon Lehman and Adam Martin. "Hilbert Series for Constructing Lagrangians: Expanding the phenomenologist's toolbox." `arxiv:1503.07537`. Physical Review D **91**, 105014 (2015). doi: 10.1103/PhysRevD.91.105014.

[3] Landon Lehman. "Extending the Standard Model Effective Field Theory with the Complete Set of Dimension-7 Operators." `arxiv:1410.4193`. Physical Review D **90**, 125023 (2014). doi: 10.1103/PhysRevD.90.125023.

[4] Joseph Bramante, Antonio Delgado, Landon Lehman, and Adam Martin. "Boosted Higgses from chromomagnetic b's: BSM $b\bar{b}h$ at high luminosity." `arxiv:1410.3484`. Physical Review D **93**, 053001 (2016). doi: 10.1103/PhysRevD.93.053001.

[5] Joseph Bramante, Sean Downes, Landon Lehman, and Adam Martin. "Clearing the Brush: The Last Stand of Solo Small Field Inflation." `arxiv:1405.7563`. Physical Review D **90**, 023530 (2014). doi: 10.1103/PhysRevD.90.023530.

[6] Carlos Alvarado, Landon Lehman, and Bryan Ostdiek. "Surveying the Scope of the $SU(2)_L$ Scalar Septet Sector." `arxiv:1404.3208`. Journal of High Energy Physics, Volume 2014, Issue 5. doi: 10.1007/JHEP05(2014)150.

Talks

[1] "Taking the Measure of Effective Field Theories." Physics Seminar, University at Buffalo, The State University of New York, March 1, 2016.

[2] "Generating functions for EFT operators." APS Prairie Section Fall Meeting 2015, University of Notre Dame, November 21, 2015.

[3] "Generating functions for EFT operators." Composite Higgs Program, Fermilab (Fermi National Accelerator Laboratory), October 28, 2015.

[4] "Hilbert Series for Constructing Lagrangians." Phenomenology 2015 Symposium, University of Pittsburgh, May 4, 2015.

[5] "Surveying the Scope of the $SU(2)_L$ Scalar Septet Sector." 2014 Spring GPS Conference, University of Notre Dame Department of Physics, April 28, 2014.

Awards

University of Notre Dame

- Arthur J. Schmitt Leadership Fellowship in Science and Engineering
- Society of Schmitt Fellows website