

Gregory Petropoulos

Curriculum Vitae

Department of Physics, 390 UCB
Boulder, CO 80309
☎ 860.877.5822
✉ gregpetrop (at) gmail (dot) com

Education

- 2010–pres. **Doctorate Student**, *University of Colorado Boulder*, Physics Department.
advisor: Professor Anna Hasenfrats
2012 **Masters of Science**, *University of Colorado Boulder*, Physics Department.
2006–2010 **Bachelor of Science**, *University of Connecticut (UCONN)*, *Magna Cum Laude*,
Major in Physics, Minor in Mathematics.

Professional Experience

- 2010–pres. **Research Assistant**, *University of Colorado, Boulder*.
advisor: Professor Anna Hasenfrats
2013–pres. **Teaching Assistant**, *University of Colorado, Boulder*.
2007–2010 **Undergraduate Research**, *University of Connecticut, Storrs*.
advisor: Professor Thomas Blum

Visiting Positions

- May–August 2010
Sogang University, Seoul

Honors and Awards

- 2010–2013 Department of Energy Graduate Research Fellowship
2009–2010 University Scholar, highest academic distinction at UCONN
2006–2010 Honors Scholar
2006–2010 Academic Excellence Scholarship, half tuition scholarship
2009 Dan Levine summer research grant
2008 SURF summer research grant
2008 University of Connecticut, New England Scholar

Leadership and Professional Service

- 26-27 October 2012 Local organizer: Lattice Meets Experiment 2012: Beyond the Standard Model,
University of Colorado
2012 University of Colorado Graduate Admissions Committee
2010–2012 Member of the Dean of Graduate Students' Student Cabinet
2011 Partnerships for Informal Science Education in the Community (PISEC)
2009–2010 President of the UCONN Chapter of the Society of Physics Students
2008–2009 Vice President of the UCONN Chapter of the Society of Physics Students

Technical Skills

Programming:C/C++; Perl, Python, Bash/csh

System administration:Unix/Linux

Markup:TeX; L^ATeX; BIBTeX; HTML

Appliations:Mathematica

Publications

- ◇ *Mass anomalous dimension from Dirac eigenmode scaling in conformal and confining systems*
Anna Hasenfratz, Anqi Cheng, Gregory Petropoulos, and David Schaich
In preparation 2012
- ◇ *Investigating infrared conformality through finite-temperature phase transitions*
Anna Hasenfratz, Anqi Cheng, Gregory Petropoulos, and David Schaich
In preparation 2012

Conference Proceedings

- ◇ *MCRG study of 8 and 12 fundamental flavors*
Gregory Petropoulos, Anqi Cheng, Anna Hasenfratz, and David Schaich
Proceedings of Science Lattice 2012:051 (In preparation 2012)
- ◇ *Bulk and finite-temperature transitions in SU(3) gauge theories with many light fermions*
David Schaich, Anqi Cheng, Anna Hasenfratz, and Gregory Petropoulos
Proceedings of Science Lattice 2012:028 (2012) [arXiv:1207.7164]
- ◇ *Mass anomalous dimension from Dirac eigenmode scaling in conformal and confining systems*
Anna Hasenfratz, Anqi Cheng, Gregory Petropoulos, and David Schaich
Proceedings of Science Lattice 2012:034 (2012) [arXiv:1207.7162]

Talks

- 30 July 2013 *Improved Lattice Renormalization Group Techniques*
31st International Symposium on Lattice Field Theory, Mainz, Germany
- 13 April 2013 *Improved Lattice Renormalization Group Techniques*
APS April meeting 2013, Denver
- 4 October 2012 *Setting the Scale With the Wilson Flow*
University of Colorado HEP-TH Journal Club, Boulder, CO
- 28 June 2012 *MCRG study of 8 and 12 fundamental flavors with mixed fundamental-adjoint gauge action in strong coupling*
30th International Symposium on Lattice Field Theory, Cairns, Australia

Posters

- 19 March 2013 *Strongly Coupled Gauge Theories with Many Flavors in the Chiral Limit*
IIP Summer School: *New Horizons in Lattice Field Theory*, Natal, Brazil

- 30 July 2012 *The Search for a Composite Higgs: A Tale of $SU(3)$ Gauge Theory with 8 and 12 Fermions*
DOE Office of Science Graduate Fellowship Annual Research Meeting, Brookhaven, NY
- 19 July 2011 *MCRG study of the $SU(2)$ pure gauge model with mixed fundamental adjoint action*
DOE Office of Science Graduate Fellowship Annual Research Meeting, Oak Ridge, TN
- 12 July 2011 *MCRG study of the $SU(2)$ pure gauge model with mixed fundamental-adjoint action*
29th International Symposium on Lattice Field Theory, Lake Tahoe, CA
- April 2010 *The Chiral Magnetic Effect*
13th Annual Frontiers in Undergraduate Research, University of Connecticut, Storrs, CT
- April 2009 *Neutron Electric Dipole Moment*
12th Annual Frontiers in Undergraduate Research, University of Connecticut, Storrs, CT

Summer Schools

- March 2013 IIP Summer School on Lattice Field Theory
August 2012 INT Summer School on Lattice QCD for Nuclear Physics

Professional Organizations

- 2009–pres. USQCD
2007–pres. Sigma Pi Sigma, Physics Honors Society
2007–pres. American Physical Society

Other Employment

- 2009–2010 Tutor at the UCONN Quantitative Center
2008–2010 Private physics and mathematics tutor
2008–2010 Resident Assistant at the UCONN
2007 Engineering Intern at Atlantic Inertial Systems

References

- Anna Hasenfrats University of Colorado Boulder, anna@eotvos.colorado.edu
Thomas DeGrand University of Colorado Boulder, degrand@aurinko.colorado.edu
Thomas Blum University of Connecticut, tblum@phys.uconn.edu