

Philip ‘Flip’ Tanedo, Ph.D

CONTACT INFORMATION	3164 Frederick Reines Hall Dept. Physics & Astronomy, University of California Irvine, CA 92697-4575, USA	+1 310 903 2849 flip.tanedo@uci.edu physics.uci.edu/tanedo
RESEARCH INTERESTS	My research focuses on models of dark matter and electroweak symmetry breaking and their phenomenology at high energy colliders and astroparticle experiments.	
EMPLOYMENT	University of California, Irvine Postdoctoral Scholar, Chancellor’s ADVANCE Postdoctoral Fellow	2013 – 2016
EDUCATION	Cornell University , Ithaca, New York <i>Doctor of Philosophy (2013), Master of Science (2010)</i> Advisor: Csaba Csáki	2008 – 2013
	Durham University (Josephine Butler College), Durham, UK <i>Master of Science by Research</i>	2007 – 2008
	Cambridge University (Trinity College), Cambridge, UK <i>Master of Advanced Study in Mathematics with Merit</i>	2006 – 2007
	Stanford University , Stanford, California <i>Bachelor of Science in Physics and Mathematics with Honors and Distinction</i>	2002 – 2006
FELLOWSHIPS & HONORS	UCI Chancellor’s ADVANCE Postdoctoral Fellowship ¹ Ford Foundation Dissertation Fellowship, Honorable Mention Paul & Daisy Soros Fellowship for New Americans Ford Foundation Predoctoral Fellowship, Honorable Mention National Science Foundation Graduate Research Fellowship Marshall Scholarship Barry M. Goldwater Scholarship	2014 – 2015 2012 2010 – 2012 2010 2006 – 2011 2006 – 2008 2005 – 2006
PUBLICATIONS	“Limiting SUSY compressed spectra scenarios,” A. Nelson, P. Tanedo and D. Whiteson, arXiv:1509.08485 [hep-ex] ; <i>submitted to Phys. Rev. D</i> “Dark Photons from the Center of the Earth: Smoking-Gun Signals of Dark Matter,” J. L. Feng, J. Smolinsky and P. Tanedo, arXiv:1509.07525 [hep-ph] ; <i>submitted to Phys. Rev. D</i> “On-Shell Mediators and Top-Charm Dark Matter Models for the Fermi Galactic Center Excess,” A. Rajaraman, J. Smolinsky and P. Tanedo, arXiv:1503.05919 [hep-ph] ; <i>submitted to Phys. Rev. D</i> “2013 ESHEP lectures on Beyond the Standard Model,” C. Csáki and P. Tanedo, Proceedings of the 2013 European School of High-Energy Physics, Parádörd, Hungary, 5–18 June 2013, edited by M. Mulders and G. Perez, CERN–2015–xxx (CERN, Geneva, 2015). http://bit.ly/1MwHLf5 “Dynamics of 3D SUSY Gauge Theories with Antisymmetric Matter,” C. Csáki, M. Martone, Y. Shirman, P. Tanedo and J. Terning, arXiv:1406.6684 [hep-th] “Hidden On-Shell Mediators for the Galactic Center γ -Ray Excess,” M. Abdullah, A. DiFranzo, A. Rajaraman, T. Tait, P. Tanedo and A. Wijangco, <i>Phys. Rev. D</i> 90 , 035004 (2014) arXiv:1404.6528 [hep-ph] “Effective theory of self-interacting dark matter,” B. Bellazzini, M. Cliche and P. Tanedo, <i>Phys. Rev. D</i> 88 , 083506 (2013) arXiv:1307.1129 “The Same-Sign Dilepton Signature of RPV/MFV SUSY,” J. Berger, M. Perelstein, M. Saelim and P. Tanedo, <i>JHEP</i> 1304 , 077 (2013) arXiv:1302.2146 [hep-ph] “Fundamental Physics at the Intensity Frontier,” J. L. Hewett, H. Weerts, R. Brock, J. N. Butler, B. C. K. Casey, J. Collar, A. de Gouvea and R. Essig <i>et al.</i> , arXiv:1205.2671 [hep-ex]	

¹Eligible for PFP faculty hiring incentive for 5 years of salary and start-up from the UC Office of the President.

“The Birds and the Bs in RS: The $b \rightarrow s\gamma$ penguin in a warped extra dimension,” M. Blanke, B. Shakya, P. Tanedo and Y. Tsai, JHEP **1208**, 038 (2012) [arXiv:1203.6650 \[hep-ph\]](#)

“SUSY_FLAVOR v2: A Computational tool for FCNC and CP-violating processes in the MSSM,” A. Crivellin, J. Rosiek, P. H. Chankowski, A. Dedes, S. Jaeger and P. Tanedo, Comput. Phys. Commun. **184**, 1004 (2013) [arXiv:1203.5023 \[hep-ph\]](#)

“Goldstone Fermion Dark Matter,” B. Bellazzini, C. Csaki, J. Hubisz, J. Shao and P. Tanedo, JHEP **1109**, 035 (2011) [arXiv:1106.2162 \[hep-ph\]](#)

“Warped penguin diagrams,” C. Csaki, Y. Grossman, P. Tanedo and Y. Tsai, Phys. Rev. D **83**, 073002 (2011) [arXiv:1004.2037 \[hep-ph\]](#)

“SUSY_FLAVOR: A Computational Tool for FCNC and CP-Violating Processes in the MSSM,” J. Rosiek, P. Chankowski, A. Dedes, S. Jager and P. Tanedo, Comput. Phys. Commun. **181**, 2180 (2010) [arXiv:1003.4260 \[hep-ph\]](#)

“Complete one-loop predictions for $B_s \rightarrow \ell^+\ell'^-$ in the MSSM”, A. Dedes, J. Rosiek and P. Tanedo, Phys. Rev. D **79**, 055006 (2009) [arXiv:0812.4320 \[hep-ph\]](#)

CONFERENCE
TALKS & INVITED
SEMINARS

“*Dark Photons from the Center of the Earth*”

TRIUMF Theory Seminar, Vancouver, Canada Dec. 2015
UC Santa Barbara HEP Experiment & Phenomenology Seminar Sep. 2015
New Directions to Shed Light on Dark Matter, Aspen, CO Sep. 2015
SUSY 2015: 23rd Conference on SUSY & Unification, Lake Tahoe, CA Aug. 2015
Anticipating 14 TeV: Insights from the LHC & Beyond, Munich, Germany Jul. 2015

“*On-Shell Mediators*” / “*Heavy, Hidden Hooperon*”

Fermilab HEP Theory Seminar, Batavia, IL Dec. 2015
UC Davis HEFTI Seminar Mar. 2015
Santa Cruz Institute for Particle Physics Theory Seminar, UC Santa Cruz Mar. 2015
Santa Fe Summer Workshop: LHC After the Higgs, Santa Fe, NM Jul. 2014
UCLA HEP Theory Seminar, Los Angeles, CA Jun. 2014
UC Riverside High Energy Physics Seminar May 2014
SLAC Theory Seminar, Menlo Park, CA May 2014
Berkeley Center for Theoretical Physics Seminar May 2014
“*Charged Lepton Flavor Violation in RS*”
International Workshop for Charged Lepton Flavor Violation, Irvine, CA May 2014

“*Stealthy Composite Stops*”

Perimeter Institute Particle Physics Seminar, Waterloo, Canada Nov. 2012

“*Goldstone Fermion Dark Matter*”

UC Davis HEFTI Seminar Oct. 2012
Harvard Particle Theory Seminar Feb. 2012
UC Irvine Joint Particle Seminar Jan. 2012
Cornell Theory Group Seminar Sep. 2011

“*The Birds and the Bs in RS*”

Phenomenology 2012 Symposium, Pittsburgh, PA May 2012

“*RS @ LHC*”

Cornell CMS Future Directions Workshop, Ithaca, NY Jan. 2012

“*Goldstone Fermion Dark Matter*”

SUSY 2011: 19th Conference on SUSY & Unification, Fermilab Aug. 2011

“*Flight of the Warped Penguins*”

Phenomenology 2011 Symposium, Madison, WI May 2011
Cornell Particle Theory Lunch Seminar Feb. 2011
Maryland Theory Seminar Mar. 2011
DAMTP–Camendish Phenomenology Seminar, Cambridge, UK Feb. 2011

“*The Birds and the B_s : $B_s \rightarrow \mu\mu$ in the MSSM*”
 Theoretical Advanced Study Institute, Boulder, CO Jun. 2009
 Cornell Particle Theory Lunch Seminar Feb. 2009
 IOP HEPP: Beauty Physics in the UK, Lancaster, UK Nov. 2008
 U. Ioannina Div. Theoretical Physics Journal Club, Greece Oct. 2008
 LHCb UK Meeting, Durham, UK Dec. 2007

WORKSHOPS &
 CONFERENCES

New Directions to Shed Light on Dark Matter, Aspen Center for Physics Sep. 2015
 Supersymmetry 2015, Lake Tahoe, CA Aug. 2015
 MIAPP: Anticipating 14 TeV, Munich, Germany Jul. 2014
 UC PFPF Academic Retreat, Lake Arrowhead, CA Apr. 2015
 Model Building in the LHC Era, Aspen Center for Physics Aug. 2014
 Santa Fe 2014 Summer Workshop, Santa Fe, NM Jul. 2014
 SLAC Workshop on Physics at a 100 TeV Collider, Menlo Park, CA Apr. 2014
 Dark Matter in Southern California III Symposium, Pasadena, CA Apr. 2014
 Dark Matter in Southern California II Symposium, Pasadena, CA Sep. 2013
 TeV Particle Astrophysics, Irvine, CA Aug. 2013
 Prospects in Theoretical Physics, Princeton, NJ Jul. 2013
 Communicating Science 2013, Cambridge, MA Jun. 2013
 Phenomenology 2012 Symposium, Pittsburgh, PA May 2012
 Fundamental Physics at the Intensity Frontier, Rockville, MD Dec. 2011
 Supersymmetry 2011, Fermilab, Batavia, IL Sep. 2011
 First Year of the LHC, KITP, Santa Barbara, CA Aug. 2011
 SUSY Breaking '11, CERN, Geneva, Switzerland May 2011
 Phenomenology 2011 Symposium, Madison, WI May 2011
 Emerging problems in particle phenomenology, ITS at CUNY Apr. 2010
 Theoretical Advanced Studies Institute, University of Colorado at Boulder Jun 2009
 International Workshop on SUSY Breaking, Durham University IPPP Apr. 2009
 ICTP School on the Gauge/Gravity Correspondence, Trieste May 2008
 Marshall Colloquium, Association of Commonwealth Universities, London, UK, May 2008
 IOP HEPP Group Annual Meeting, University of Lancaster Apr. 2008
 Higgs–Maxwell Workshop: EWSB, Royal Society of Edinburgh Feb. 2008
 Young Experimentalists and Theorists Institute, Durham University IPPP Jan. 2008
 IPPP Annual Theory Meeting, Durham University Dec. 2007
 UK LHCb Annual Meeting, Durham University IPPP Dec. 2007
 Cosener’s Forum on Heavy Flavor Physics, Cosener’s House, Abingdon, UK Jun. 2007

TEACHING

Cornell University, Ithaca, New York
Teaching Assistant, Physics 3318: Analytical Mechanics Spring 2013
Teaching Assistant, Physics 3327: Advanced Electricity & Magnetism Fall 2012
Course Grader, Physics 7651: Quantum Field Theory I Fall 2011

UC Berkeley, Berkeley, California
Course Grader, Physics 137A: Quantum Mechanics Summer 2006

Stanford University, Stanford, California
Teaching Assistant, Physics 121: Electrodynamics II Spring 2006
Course Grader, Physics 161: Cosmology Spring 2006
Course Assistant, The Elementary Particles and their Fundamental Interactions Summer 2004

SERVICE	Referee: <i>Physics Review D</i> (APS)	2014, 2015
	Referee: <i>European Physical Journal C</i> (Springer)	2014
	Referee: <i>Physics of the Dark Universe</i> (Elsevier)	2013, 2015
	Referee: <i>Annals of Physics</i> (Elsevier)	2013
	Referee: <i>Europhysics Letters</i> (EPS)	2012
OUTREACH	Science Ambassador: Science Hack Day San Francisco	2015
	One of six invited scientists sponsored by Gordon & Betty Moore Foundation	
	Blogger, organizer: ParticleBites, a research digest	from 2013
	Blogger: US/LHC Blogs (Quantum Diaries), public outreach blog	2009 – 2012
	Lecturer: Particle Physics for Undergrads (Cornell undergraduate research program)	2012
Lecturer: Stanford ESP <i>SPLASH!</i> and <i>SHEP</i> high school courses on particle physics	2005	
OUTREACH TALKS & PANELS	“ <i>Balancing writing your dissertation and finding a postdoc position</i> ” Panelist, UCI Graduate Division & ADVACE Program	Nov. 2014, 2015
	“ <i>Data vs. Dark Matter: Opportunities for Open Science in Particle Physics</i> ” Science Hack Day, San Francisco (Gordon & Betty Moore Science Ambassador)	Oct. 2015
	“ <i>Here be dragons: [fairy] tales from beyond the Standard Model</i> ” Cornell Society of Physics Students	Apr. 2013
	“ <i>The Physics of Angels & Demons</i> ” Cornell Institute for Physics Teachers	Jul. 2009
	“ <i>Applying for Graduate Fellowships Information Session</i> ” Panelist, Cornell Physics Department	Oct. 2008
	“ <i>Quantum penguins hint at the nature of matter and antimatter</i> ” Marshall Aid Commemoration Commission Colloquium, London, UK	May 2008