# Philip (Flip) Tanedo flip.tanedo@ucr.edu particle.ucr.edu & CONTACT INFORMATION 3054 Physics Building 0000-0003-4642-2199 D University of California P.Tanedo.1 Riverside, CA 92521, USA @FlipTanedo y 6 fliptanedo +1 951 827 8324 RESEARCH I am a theoretical physicist seeking to understand what dark matter is, how it got here, why it is still here, and what we have to do to confirm its identity as an elementary particle. I use quantum field theory to address open questions in fundamental science. University of California, Riverside **EMPLOYMENT** UCR Associate Professor, Department of Physics & Astronomy Assistant Professor, Department of Physics & Astronomy 2016 - 2022 **UCI** University of California, Irvine Postdoctoral Scholar, Chancellor's ADVANCE Postdoctoral Fellow 2013 - 2016Cornell University, Ithaca, New York **EDUCATION** Advisor: Csaba Csáki; Doctor of Philosophy (2013), Master of Science (2010) 2008 - 2013Durham University (Josephine Butler College), Durham, UK Advisor: Athanasios Dedes; Master of Science by Research 2007 - 2008 Cambridge University (Trinity College), Cambridge, UK **7** Master of Advanced Study in Mathematics with Merit 2006 - 2007 Stanford University, Stanford, California Bachelor of Science in Physics and Mathematics with Honors and Distinction 2002 - 2006 UCR Office of Student Life: Adviser of the Year FELLOWSHIPS & **HONORS** Awarded to a UCR faculty member for outstanding mentorship of a student group. Nominated by the Physics Organization for Woman & the Under-Represented. National Science Foundation CAREER Award NSF's most prestigious awards for early-career faculty with the potential to serve as academic role models in research and education and to lead advances in the mission of their department. UCR Junior Faculty Excellence in Teaching Award 2021 Awarded by the UCR Academy of Distinguished Teaching to junior faculty. 3 awards per year. Hellman Fellowship 2020 - 2021Awarded by the Hellman Fellows Fund to support to junior faculty who show capacity for great distinction in their research. 7 UCR fellows per year. UCR Graduate Division: Commitment to Graduate Diversity Award For faculty who champion efforts to promote a diverse and inclusive graduate student and campus climate. Up to 2 awards per year. UCI Chancellor's ADVANCE Postdoctoral Fellowship 2014 - 2015For strong promise for faculty appointment and a commitment to equal opportunity. Drawn from finalists of the UC President's Postdoctoral Fellowship Program. Ford Foundation Dissertation Fellowship, Honorable Mention 2012 Individuals with evidence of superior academic achievement and committed to a career in teaching and research at the college or university level in the U.S. Paul & Daisy Soros Fellowship for New Americans For first- and second-generation immigrants poised to make significant contributions to society,

2010

culture or their academic field. 30 fellows per year.

Ford Foundation Predoctoral Fellowship, Honorable Mention

Individuals with evidence of superior academic achievement and committed to a career in teaching and research at the college or university level in the U.S.

# National Science Foundation Graduate Research Fellowship

Outstanding graduate students who have demonstrated the potential to be high achieving scientists and engineers, early in their careers. Approximately 2000 awards out of 12,000 applicants.

## Marshall Scholarship

2006 – 2008

For Americans of high ability to pursue graduate study in the UK. 50 scholars per year out of a pool of 1000 university endorsed applicants.

# Barry M. Goldwater Scholarship

2005 - 2006

2006 - 2011

The most prestigious undergraduate scholarship in the natural sciences, mathematics, and engineering in America. Approximately 400 awards out of 5000 2nd and 3rd year undergraduates; two nominees per institution.

#### **PUBLICATIONS**

The standard practice in particle physics is to list authors in alphabetical order.

- "Holography of Broken U(1) Symmetry," I. Chaffey, S. Fichet and P. Tanedo, arXiv:2309.00040
- "Snowmass Cosmic Frontier Report," A. S. Chou + 31 authors. arXiv:2211.09978
- "Snowmass 2021 Dark Matter Complementarity Report," A. Boveia + 26 authors. arXiv:2211.07027
- "Snowmass Theory Frontier Report," N. Craig + 40 authors. arXiv:2211.05772
- "Snowmass 2021 Cross Frontier Report: Dark Matter Complementarity (Extended Version)," A. Boveia + 26 authors. arXiv:2210.01770
- "Snowmass Theory Frontier: Astrophysics and Cosmology," D. Green + many authors. arXiv:2209.06854

"Dark Z at the International Linear Collider,"

Y. C. San, M. Perelstein and P. Tanedo,

Phys. Rev. D 106 (2022) no.1, 015027 arXiv:2205.10304

"Efficient sampling of constrained high-dimensional theoretical spaces with machine learning,"

J. Hollingsworth, M. Ratz, P. Tanedo and D. Whiteson,

Eur. Phys. J. C 81 (2021) no.12, 1138 arXiv:2103.06957

"Continuum-Mediated Self-Interacting Dark Matter,"

I. Chaffey, S. Fichet and P. Tanedo,

JHEP 06 (2021), 008 arXiv:2102.05674

"Dark kinetic heating of neutron stars from contact interactions with relativistic targets,"

A. Joglekar, N. Raj, P. Tanedo and H. B. Yu

Phys. Rev. D **102**, no.12, 123002 (2020) arXiv:2004.09539

"Effective Field Theory in AdS: Continuum Regime, Soft Bombs, and IR Emergence,"

A. Costantino, S. Fichet and P. Tanedo

Phys. Rev. D 102, no.11, 115038 (2020) arXiv:2002.12335

"Relativistic capture of dark matter by electrons in neutron stars,"

A. Joglekar, N. Raj, P. Tanedo and H. B. Yu

Phys. Lett. B, 135767 (2020) arXiv:1911.13293

"Exotic Lepton-Flavor Violating Higgs Decays,"

J. A. Evans, P. Tanedo and M. Zakeri

JHEP **01**, 028 (2020) arXiv:1910.07533

"Exotic Spin-Dependent Forces from a Hidden Sector,"

A. Costantino, S. Fichet and P. Tanedo

JHEP **03**, 148 (2020) arXiv:1910.02972

"Vector Self-Interacting Dark Matter,"

I. Chaffey and P. Tanedo,

Phys. Rev. D **101** (2020) no.7 075005 arXiv:1907.10217

"The Warped Dark Sector,"

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P. Brax, S. Fichet and P. Tanedo,
Phys. Lett. B 798, 135012 (2019) arXiv:1906.02199
"DarkCapPy: Dark Matter Capture and Annihilation,"
A. Green and P. Tanedo,
Comput. Phys. Commun. 242, 120-131 (2019) arXiv:1808.03700
"Just a Taste: Lectures on Flavor Physics,"
Y. Grossman and P. Tanedo, published in Proceedings, 2016 Theoretical Advanced Studies Institute.
ISBN: 9789813233331, arXiv:1711.03624
"Neutron stars at the dark matter direct detection frontier."
N. Raj, P. Tanedo and H. B. Yu,
Phys. Rev. D 97 (2018) no.4 043006 arXiv:1707.09442
"Dark Photons from Captured Inelastic Dark Matter Annihilation: Charged Particle Signatures,"
J. Smolinsky and P. Tanedo,
Phys. Rev. D 95 no.7, 075015 (2017) arXiv:1701.03168
"Dark Matter Interpretation of the Fermi-LAT Observation Toward the Galactic Center,"
C. Karwin, S. Murgia, T. M. P. Tait, T. A. Porter and P. Tanedo,
Phys. Rev. D 95, no. 10, 103005 (2017) arXiv:1612.05687
"Lepton-Flavor Violating Mediators,"
I. Galon, A. Kwa and P. Tanedo,
JHEP 1703, 064 (2017) arXiv:1610.08060
"Particle Physics Models for the 17 MeV Anomaly in Beryllium Nuclear Decays,"
J. L. Feng, B. Fornal, I. Galon, S. Gardner, J. Smolinsky, T. M. P. Tait and P. Tanedo,
Phys. Rev. D 95, no. 3, 035017 (2017) arXiv:1608.03591
The standard practice in particle physics is to list authors in alphabetical order.
"Dark Sectors 2016 Workshop: Community Report,"
J. Alexander et al., arXiv:1608.08632
"Protophobic Fifth-Force Interpretation of the Observed Anomaly in <sup>8</sup>Be Nuclear Transitions," J. L. Feng,
B. Fornal, I. Galon, S. Gardner, J. Smolinsky, T. M. P. Tait and P. Tanedo,
Phys. Rev. Lett. 117, no. 7, 071803 (2016) arXiv:1604.07411
"Kaluza-Klein gluons at 100 TeV: NLO corrections,"
B. Lillard, T. M. P. Tait and P. Tanedo,
Phys. Rev. D 94, no. 5, 054012 (2016) arXiv:1602.08622
"Detecting dark matter through dark photons from the Sun: Charged particle signatures,"
J. L. Feng, J. Smolinsky and P. Tanedo,
Phys. Rev. D 93, 115036 (2016) arXiv:1602.01465
"Limiting SUSY compressed spectra scenarios,"
A. Nelson, P. Tanedo and D. Whiteson, Phys. Rev. D 93, 115029 (2016) arXiv:1509.08485
"Dark Photons from the Center of the Earth: Smoking-Gun Signals of Dark Matter." J. L. Feng,
J. Smolinsky and P. Tanedo,
Phys. Rev. D 93, 015014 (2016) arXiv:1509.07525
"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
"2013 ESHEP lectures on Beyond the Standard Model,"
C. Csáki and P. Tanedo, Proceedings of the 2013 European School of High-Energy Physics, Parád-
fürdő, Hungary, 5-18 June 2013, edited by M. Mulders and G. Perez, CERN-2015-004 (CERN,
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Geneva, 2015), ISBN: 9789290834205. arXiv:1602.04228

"Dynamics of 3D SUSY Gauge Theories with Antisymmetric Matter,"

**PUBLICATIONS** 

BEFORE UCR

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C. Csáki, M. Martone, Y. Shirman, P. Tanedo and J. Terning,
JHEP 1408, 141 (2014) arXiv:1406.6684
"Hidden On-Shell Mediators for the Galactic Center \gamma-Ray Excess."
M. Abdullah, A. DiFranzo, A. Rajaraman, T. Tait, P. Tanedo and A. Wijangco,
Phys. Rev. D 90, 035004 (2014) arXiv:1404.6528
"Effective theory of self-interacting dark matter,"
B. Bellazzini, M. Cliche and P. Tanedo,
Phys. Rev. D 88, 083506 (2013) arXiv:1307.1129
"The Same-Sign Dilepton Signature of RPV/MFV SUSY."
J. Berger, M. Perelstein, M. Saelim and P. Tanedo,
JHEP 1304, 077 (2013) arXiv:1302.2146
"Fundamental Physics at the Intensity Frontier,"
J. L. Hewett, H. Weerts, R. Brock, J. N. Butler, B. C. K. Casey, J. Collar, et al.,
Proceedings of the 2011 workshop on Fundamental Physics at the Intensity Frontier, arXiv:1205.2671
"The Birds and the Bs in RS: The b \to s\gamma penguin in a warped extra dimension,"
M. Blanke, B. Shakya, P. Tanedo and Y. Tsai,
JHEP 1208, 038 (2012) arXiv:1203.6650
"SUSY FLAVOR v2: A Computational tool for FCNC and CP-violating processes in the MSSM,"
A. Crivellin, P. H. Chankowski, A. Dedes, S. Jaeger, J. Rosiek, and P. Tanedo,
Comput. Phys. Commun. 184, 1004 (2013) arXiv:1203.5023
"Goldstone Fermion Dark Matter,"
B. Bellazzini, C. Csaki, J. Hubisz, J. Shao and P. Tanedo,
JHEP 1109, 035 (2011) arXiv:1106.2162
"Warped penguin diagrams,"
C. Csaki, Y. Grossman, P. Tanedo and Y. Tsai,
Phys. Rev. D 83, 073002 (2011) arXiv:1004.2037
"SUSY FLAVOR: A Computational Tool for FCNC and CP-Violating Processes in the MSSM,"
P. Chankowski, A. Dedes, S. Jager, J. Rosiek, and P. Tanedo,
Comput. Phys. Commun. 181, 2180 (2010) arXiv:1003.4260
"Complete one-loop predictions for B_s \to \ell^+ \ell'^- in the MSSM",
A. Dedes, J. Rosiek and P. Tanedo,
Phys. Rev. D 79, 055006 (2009) arXiv:0812.4320
"Neutron Star Heating from Dark Matter: The Relativistic Frontier"
Invited talk, Center for Theoretical Underground Physics and Related Areas, SD
                                                                                         Jul. 2023
"Why haven't we discovered dark matter yet?"
Invited Hybrid Seminar, UW Bothell Physics Seminar, Bothell, WA
                                                                                        Nov. 2022
Invited Seminar, Loyola University, Chicago, IL
                                                                                        Sep. 2022
Invited Colloquium, California State University, Long Beach External, CA
                                                                                        Sep. 2023
"Adventures in a Warped Dark Sector"
Invited Physics Seminar, University of Melbourne (Hybrid), Australia
                                                                                        Oct. 2022
"Dark Matter in Compact Objects"
Invited Plenary, SAIFR/Princípia Workshop on the Nature of Dark Matter, São Paulo
                                                                                        Nov. 2022
"Theory & the Cosmic Frontier"
Invited Talk, KITP Conference: Snowmass Theory Frontier, Santa Barbara, CA
                                                                                        Feb. 2021
"Some [likely] Wrong Ideas About Dark Matter and What They Teach Us"
Colloquium, UCR Physics & Astronomy Department, Riverside, CA
                                                                                        Oct. 2021
"The Invisible Universe and You"
Invited Talk, UCR Hellman Fellows Symposium, Riverside, CA
                                                                                        Mar. 2021
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INVITED TALKS

| "Warped Dark Sectors" Invited Talk, A Rainbow of Dark Sectors, Aspen Center for Physics, Aspen, CO Invited Seminar, Korea Institute for Advanced Studies, Seoul, Korea                                                                                                                                                                                                                                                                                                                                                                                                          | Mar. 2021<br>Nov. 2020                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| "e <sup>+</sup> e <sup>-</sup> Production of Dark Sector Particles"<br>Americas Workshop on Linear Colliders 2020, SLAC, Menlo Park, CA                                                                                                                                                                                                                                                                                                                                                                                                                                         | Oct. 2020                                                                                    |
| "Dark Matter Heating Neutron Stars: the Electronic Frontier"<br>Invited talk, Particle Seminar, Brookhaven National Lab, NY                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Feb. 2020                                                                                    |
| "How Not to Discover the WIMP" / "Whatever Happened to the WIMP of Tomorrow? Invited Colloquium, Cornell Physics Department, Ithaca, NY Colloquium, UCR Physics & Astronomy Department, Riverside, CA Invited Colloquium, Aspen Center for Physics, Aspen, CO Invited Plenary, Samahang Pisika ng Pilipinas Annual Conference, Philippines                                                                                                                                                                                                                                      | Oct. 2020<br>Oct. 2020<br>Jun. 2019<br>May. 2019                                             |
| National Institute for Physics/UP Diliman, Philippines Sam Houston State University Physics Seminar, Huntsville, TX University of Arizona Student Selected Physics Colloquium, Tucson, AZ University of Louisiana Physics Seminar, Lafayette, LA                                                                                                                                                                                                                                                                                                                                | May. 2019<br>Apr. 2019<br>Apr. 2019<br>Apr. 2019                                             |
| "Vector Self-Interacting Dark Matter" Invited talk, 2019 Mitchell Conference, College Station, TX Texas A&M Mitchell Institute HEP Seminar, College Station, TX                                                                                                                                                                                                                                                                                                                                                                                                                 | May. 2019<br>Apr. 2019                                                                       |
| "Dark Matter Complementarity / Is the WIMP Dead?" Harvey Mudd Physics Colloquium, Pomona, CA USC Physics Colloquium, Los Angeles, CA The Small-Scale Structure of Cold (?) Dark Matter Invited talk, Kavli Institute for Theoretical Physics, Santa Barbara, CA                                                                                                                                                                                                                                                                                                                 | Nov. 2018<br>Oct. 2018<br>Jun. 2018                                                          |
| "Composite Mediators"  Santa Fe Workshop: Trending Topics in HEP, Plenary talk, Santa Fe, NM  Matter Detection and Detectability: Paradigm Confirmation or Shift?  Invited talk, Kavli Institute for Theoretical Physics, Santa Barbara, CA  Particle Theory Seminar, Lawrence Berkeley National Laboratory, Berkeley, CA  American Physical Society April Meeting, Columbus, OH  T-2 Seminar, Los Alamos National Laboratory, Los Alamos, NM                                                                                                                                   | Jul. 2018  Apr. 2018  Apr. 2018  Apr. 2018  Mar. 2018                                        |
| "Light Mediators to Dark Sectors" Invited talk, American Physical Society April Meeting, Columbus, OH                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Apr. 2018                                                                                    |
| "Light mediators and terrestrial dark matter capture" New Directions in Dark Matter and Neutrino Physics, Invited Talk, Perimeter Institute, Waterloo, CA                                                                                                                                                                                                                                                                                                                                                                                                                       | Jul. 2017                                                                                    |
| "Models, Exotic Signatures and Proposed Searches" XI International Conference on the Interconnection between Particle Physics and Cosm<br>Invited Plenary Talk, Corpus Christi, TX                                                                                                                                                                                                                                                                                                                                                                                              | nology,<br>May 2017                                                                          |
| "Composite Higgs, Composite Mediators"  DM at LHC, UC Irvine, CA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Apr. 2017                                                                                    |
| "New Physics in Nuclear Transitions? The 17 MeV Anomaly in <sup>8</sup> Be" Focus Workshop on Particle Physics and Cosmology, CTPU-IBS, Daejon City, Korea Beyond the Standard Model Workshop, MCTP, Ann Arbor, MI LHC Awakens: A New Energy Frontier, Aspen Center for Physics Aspen, CO Latin American Webinars on Physics, Google Hangouts on the Air (webcast) LHC Run II Workshop, Santa Fe, NM Cornell Particle Theory Seminar, Ithaca, NY UMD Particle Theory Seminar, College Park, MD UC Davis Theory Lunch, Davis, CA SLAC Dark Sectors 2016 Workshop, Menlo Park, CA | Dec. 2016 Oct. 2016 Sep. 2016 Sep. 2016 July. 2016 May. 2016 May. 2016 May. 2016 April. 2016 |
| "Dark Sunshine"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                              |

<sup>&</sup>quot; $Dark\ Sunshine$ "

| Cal State Fullerton Physics Colloquium, Fullerton, CA                                                     | Mar. 2016              |
|-----------------------------------------------------------------------------------------------------------|------------------------|
| CSU Long Beach, Physics Colloquium, Long Beach, CA                                                        | Mar. 2016              |
| "Dark Photons from the Center of the Earth"                                                               |                        |
| UT Austin Seminar, Austin, TX                                                                             | Feb. 2017              |
| UC Davis Theory Seminar, Davis, CA                                                                        | May. 2016              |
| PIKIO Workshop, Cincinnati, OH                                                                            | Feb. 2016              |
| MCTP Brown Bag Seminar, Ann Arbor, MI                                                                     | Feb. 2016              |
| SLAC Theory Seminar, Menlo Park, CA<br>UC Riverside Theory Seminar, Riverside, CA                         | Feb. 2016<br>Dec. 2015 |
| 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<br>Berkeley Center for Theoretical Physics Seminar                    | May 2014               |
| ·                                                                                                         | May 2014               |
| "Charged Lepton Flavor Violation in RS"                                                                   | NA 0044                |
| International Workshop for Charged Lepton Flavor Violation, Irvine, CA                                    | May 2014               |
| "Stealthy Composite Stops"                                                                                | N. 0040                |
| Perimeter Institute Particle Physics Seminar, Waterloo, Canada                                            | Nov. 2012              |
| "Goldstone Fermion Dark Matter"                                                                           |                        |
| UC Davis HEFTI Seminar                                                                                    | Oct. 2012              |
| Harvard Particle Theory Seminar UC Irvine Joint Particle Seminar                                          | Feb. 2012<br>Jan. 2012 |
| Cornell Theory Group Seminar                                                                              | Sep. 2011              |
| "The Birds and the Bs in RS"                                                                              | 00p. 2011              |
| Phenomenology 2012 Symposium, Pittsburgh, PA                                                              | May 2012               |
| "RS @ LHC"                                                                                                | a, 2012                |
| Cornell CMS Future Directions Workshop, Ithaca, NY                                                        | Jan. 2012              |
|                                                                                                           | 0dii. 2012             |
| "Goldstone Fermion Dark Matter" SUSY 2011: 19th Conference on SUSY & Unification, Fermilab                | Aug. 2011              |
|                                                                                                           | Aug. 2011              |
| "Flight of the Warped Penguins"  Phanagraph and 2011 Symposium Madisan WI                                 | M0011                  |
| Phenomenology 2011 Symposium, Madison, WI<br>Cornell Particle Theory Lunch Seminar                        | May 2011<br>Feb. 2011  |
| Maryland Theory Seminar                                                                                   | Mar. 2011              |
| DAMTP-Cavendish Phenomenology Seminar, Cambridge, UK                                                      | Feb. 2011              |
| "The Birds and the $B_s \colon B_s \to \mu\mu$ in the MSSM"                                               |                        |
| The Birds and the $B_s$ : $B_s \to \mu\mu$ 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              |
|                                                                                                           |                        |

TRISEP Lectures on BSM Physics, TRIUMF, Vancouver

Jul. 2019

# WORKSHOPS & CONFERENCES

Matter Theory, Simulation, and Analysis in the Era of Large Surveys, KITP, Santa Barbara CA Jun. 2024

| Jun. 2024                                                                             |      |      |
|---------------------------------------------------------------------------------------|------|------|
| CETUP* 2023: Dark Matter, Sanford Underground Research Facility, Lead, SD             | Jun. | 2023 |
| Theoretical Physics for Machine Learning, Aspen Center for Physics, Aspen, CO         | Feb. | 2023 |
| Workshop on the Nature of Dark Matter, Principia Institute, ICTP-SAIFR, São Paulo     | Nov. | 2023 |
| Sustainable HEP 2nd ed. (remote), CERN                                                | Sep. | 2022 |
| Searching for New Physics, Aspen Center for Physics, Aspen, CO                        | Aug. | 2022 |
| IAIFI Summer Workshop, Tufts University, MA                                           | Aug. | 2022 |
| IAIFI Ph.D Summer School (student), Tufts University, MA                              | Aug. | 2022 |
| First Pollica Workshop on Dark Matter (organizer), Pollica, Italy                     | Jun. | 2022 |
| American Physical Society April Meeting, New York, NY                                 | Apr. | 2022 |
| Neutrinos as a Portal to New Physics and Astrophysics, KITP, Santa Barbara CA         | Mar. | 2022 |
| Snowmass Theory Frontier Meeting, KITP, Santa Barbara CA                              | Feb. | 2022 |
| APS IDEA October Workshop, Remote Meeting, American Physical Society                  | Oct. | 2021 |
| Dark Matter from the Laboratory to the Cosmos, Aspen Center for Physics, Aspen, CO    | Aug. | 2021 |
| A Rainbow of Dark Sectors, Aspen Center for Physics, Aspen, CO                        | Mar. | 2021 |
| Americas Workshop on Linear Colliders 2020, Remote meeting, SLAC, Menlo Park, CA      | Jun. | 2021 |
| Phenomenology Symposium (session chair), Remote meeting, University of Pittsburgh, PA | May  | 2021 |
| APS IDEA Network Launch Meeting, Remote meeting, American Physical Society            | Jun. | 2020 |
| Southern California Beyond the Standard Model, UCI, Irvine, CA                        | Sep. | 2019 |
| KITP Origin of the Vacuum Energy & Electroweak Scales, Santa Barbara, CA              | Jun. | 2019 |
| Aspen Center for Physics, Aspen, CO                                                   | Jun. | 2019 |
| Samahang Pisika ng Pilipinas (Philippine Physics Society) Conference, Philippines     | Jun. | 2019 |
| Mitchell Conference, Texas A&M University, College Station, TX                        | May  | 2019 |
| KITP Follow-On Workshop (CDM18), Santa Barbara, CA                                    | Mar. | 2019 |
| Southern California Beyond the Standard Model (organizer), UCLA, Los Angeles, CA      | Jan. | 2019 |
| APS Bridge/National Mentoring Community Conference, Stanford, CA                      | Nov. | 2018 |
| Flavor of New Physics in Collisions, Aspen Center for Physics, Aspen, CO              | Aug. | 2018 |
| Santa Fe Workshop: Trending Topics in HEP, Santa Fe, NM                               | Jul. | 2018 |
| American Physical Society April Meeting, Columbus, OH                                 | Apr. | 2018 |
| Dark Matter in Southern California IV Symposium, Pasadena, CA                         | Sep. | 2017 |
| New Directions in Dark Matter and Neutrino Physics, Perimeter Institute, Waterloo, CA |      | 2017 |
| Weak Interactions and Neutrinos, UCI, Irvine, CA                                      | Jun. | 2017 |
| XI International Conference on Particle Physics and Cosmology, Corpus Christi, TX     | May  | 2017 |
| UC President's Postdoctoral Fellow Spring Retreat, Lake Arrowhead, CA                 | Apr. | 2017 |
| Dark Matter at LHC, UCI, Irvine, CA                                                   | Apr. | 2017 |
| Southern California Beyond the Standard Model (organizer), UCR, Riverside, CA         | Apr. | 2017 |
| Beyond WIMPs: from Theory to Detection, Simons Center, Stony Brook, NY                | Mar. | 2017 |
| Focus Workshop on Particle Physics and Cosmology, CTPU-IBS, Korea                     | Dec. | 2016 |
| Beyond the Standard Model Workshop, MCTP, Ann Arbor, MI                               | Oct. | 2016 |
| The LHC Awakens, Aspen Center for Physics, Aspen, CO                                  |      | 2016 |
| Santa Fe Summer Workshop: LHC Run II, Santa Fe, NM                                    |      | 2016 |
| New Accelerators for the 21st Century, KITP, Santa Barbara CA                         | Jun. | 2016 |
| SLAC Dark Sectors 2016 Workshop, Menlo Park, CA                                       |      | 2016 |
| PIKIO Workshop, Cincinnati, OH                                                        | Feb. | 2016 |
|                                                                                       |      |      |

|            | UCLA Dark Matter 2016, Westwood, CA                                                                                                                                                   | Feb. 2016 |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
|            | Science Hack Day: San Francisco, CA                                                                                                                                                   | Oct. 2015 |
|            | UCI Data Science Initiative: Predictive Modeling in Python, Irvine, CA                                                                                                                | Oct. 2015 |
|            | UC PPFP Fall Conference, Oakland, CA                                                                                                                                                  | Sep. 2015 |
|            | New Directions to Shed Light on Dark Matter, Aspen Center for Physics, Aspen, CO                                                                                                      | Sep. 2015 |
|            | Supersymmetry 2015, Lake Tahoe, CA                                                                                                                                                    | Aug. 2015 |
|            | MIAPP: Anticipating 14 TeV, Munich, Germany                                                                                                                                           | Jul. 2014 |
|            | UC PPFP Academic Retreat, Lake Arrowhead, CA                                                                                                                                          | Apr. 2015 |
|            | UCI Data Science Initiative: Software Carpentry                                                                                                                                       | Feb. 2015 |
|            | UC PPFP 30th Anniversary Meeting, Berkeley, CA                                                                                                                                        | Oct. 2014 |
|            | Model Building in the LHC Era, Aspen Center for Physics, Aspen, CO                                                                                                                    | 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 |
|            | Soros Fellowship for New Americans Fall Conference, OSI, New York                                                                                                                     | Oct. 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  |
|            | Soros Fellowship for New Americans Fall Conference, OSI, New York                                                                                                                     | Oct. 2010 |
|            | 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 |
|            | Young Researchers in Mathematics (Beyond Part III), Cambridge University                                                                                                              | Apr. 2009 |
|            | ICTP School on the Gauge/Gravity Correspondence, Trieste                                                                                                                              | May 2008  |
|            | Marshall Colloquium, Association of Commonwealth Universities, London, UK,                                                                                                            | May 2008  |
|            | 5th Part III Return Conference, Cambridge University                                                                                                                                  | Apr. 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 |
| SOFTWARE   | GitHub: http://github.com/fliptanedo.  DarkCapPy, with A. Green  http://github.com/agree019/DarkCapPy  GUSY FLAVOR with I. Posiel: A. Chivellin R. Chapleyweli A. Dades and S. Lacron | Nov. 2018 |
|            | SUSY_FLAVOR, with J. Rosiek, A. Crivellin, P. Chankowski, A. Dedes, and S. Jaeger http://www.fuw.edu.pl/susy_flavor/                                                                  | Mar. 2010 |
| ORGANIZED  | Workshop Co-organizer: Dark Pollica Workshop on Dark Matter, Pollica, Italy                                                                                                           | Jun. 2022 |
| ACTIVITIES | Workshop Co-organizer: Communicating Science AIP, College Park, MD                                                                                                                    | Sep. 2019 |
|            |                                                                                                                                                                                       |           |

|                  | Fundamental Physics Innovation Award: Gordon & Betty Moore Foundation/AP Hosting Sylvain Fichet (Travel Award), UCR, Riverside, CA Hosting Benjamin Nachmann (Visitor Award), UCR, Riverside, CA Workshop Organizer: Southern California Beyond the Standard Model SoCal BSM 2017, UCR, Riverside, CA SoCal BSM 2019, UCLA, Los Angeles, CA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Aug. 2019<br>Jan. 2019<br>Apr. 2017<br>Jan. 2019                                                                                                                                                                                                          |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OTHER ACTIVITIES | UCR Emotion & Society Lab Collaborator for public book club events. Director: Myisha Cherry.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2022 –                                                                                                                                                                                                                                                    |
|                  | UCR Center for Ideas & Society Academic Book Club  UCR program for cross-discipline critical inquiry and discussions.  This Is How They Tell Me The World Ends (organizer, 7 members)  White Kids & Klara and the Sun (organizer, 6 members)  White Kids (organizer, 6 members)  The Problem with Everything (organizer, 6 members)  iGen (participant, 7 members)  Perry Link Seminar  "What Are the Intrinsic Rewards of Our Work?" seminar.  Cross-discipline discussions between 12 invited faculty.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Mar. 2022<br>Nov. 2021<br>Nov. 2021<br>Feb. 2021<br>Oct. 2019<br>AprJun. 2019                                                                                                                                                                             |
| TEACHING         | UC Riverside, Riverside, CA  Instructor, Physics 017: Linear Algebra for Physics Instructor, Physics 165: Particle Physics Instructor, Physics 231: Methods in Theoretical Physics Instructor, Physics 017: Linear Algebra for Physics Instructor, Physics 017: Linear Algebra for Physics Instructor, Physics 165: Particle Physics Instructor, Physics 017: Linear Algebra for Physics Instructor, Physics 231: Methods in Theoretical Physics Instructor, Physics 231: Methods in Theoretical Physics Instructor, Physics 40B: General Physics Instructor, Physics 231: Methods in Theoretical Physics Instructor, Physics 230B: Quantum Field Theory Instructor, Physics 165: Particle Physics Instructor, Physics 165: Particle Physics Instructor, Physics 231: Methods in Theoretical Physics Instructor, Physics 177: Computational Methods for Physical Sciences Instructor, Physics 231: Methods in Theoretical Physics Instructor, Physics 231: Met | Spr. 2024 Spr. 2024 Fall 2023 Spr. 2023 Fall 2022 Fall 2022 Spr. 2021 Spr. 2021 Spr. 2021 Fall 2021 Win. 2021 Fall 2020 Win. 2020 Win. 2020 Win. 2020 Win. 2019 Fall 2019 Win. 2019 Fall 2018 Spr. 2018 Win. 2018 Fall 2017 Spr. 2017 Win. 2017 Fall 2016 |
|                  | Teaching Assistant, Physics 3327: Advanced Electricity & Magnetism Course Grader, Physics 7651: Quantum Field Theory I  UC Berkeley, Berkeley, CA  Course Grader, Physics 137A: Quantum Mechanics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Fall 2012<br>Fall 2011<br>Sum. 2006                                                                                                                                                                                                                       |
|                  | · · · · · · · · · · · · · · · · · · ·                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                           |

|               | Stanford University, Stanford, CA                                                                                   |                        |
|---------------|---------------------------------------------------------------------------------------------------------------------|------------------------|
|               | Teaching Assistant, Physics 121: Electrodynamics II                                                                 | Spr. 2006              |
|               | Course Grader, Physics 161: Cosmology Course Assistant, The Elementary Particles and their Fundamental Interactions | Spr. 2006<br>Sum. 2004 |
|               | Course rissistant, the Elementary retrieves and their randomental interactions                                      | Ouiii. 2004            |
| RECENT PRESS  |                                                                                                                     |                        |
| TIEGENTTTIEGG | "Ask a Scientist creates connections and understanding," Constance Walter, SURF News and Updates                    | Aug. 2023              |
|               | "Can a theory ever die?,"                                                                                           | J                      |
|               | Sarah Charley, Symmetry Magazine                                                                                    | May 2022               |
|               | "Where do theories come from?","                                                                                    |                        |
|               | Sarah Charley, Symmetry Magazine                                                                                    | Apr. 2022              |
|               | "Beyond the Standard Model ,"  Vertical Millon Commentary Magazine                                                  | E-1- 0000              |
|               | Katrina Miller, Symmetry Magazine                                                                                   | Feb. 2022              |
|               | "What is annihilation?"," Graycen Wheeler, Symmetry Magazine                                                        | Feb. 2022              |
|               | "Fourteen UC Riverside professors receive NSF CAREER Awards,"                                                       |                        |
|               | Holly Ober, Inside UCR                                                                                              | Aug 2021               |
|               | "Welcome Back ,"                                                                                                    |                        |
|               | Imran Ghori, UCR Magazine                                                                                           | Sum 2021               |
|               | "Billionaires in the great beyond,"                                                                                 |                        |
|               | UCR News                                                                                                            | July 2021              |
|               | "A new dimension in the quest for dark matter"," Iqbal Pittalwala, UCR News                                         | June 2021              |
|               | "Hackathons catch on for creativity, education, and networking,"                                                    | 00110 2021             |
|               | Toni Feder Physics Today 74, 5, 23 (2021)                                                                           | May 2021               |
|               | "Veteran and CC transfer student heads to UCLA,"                                                                    |                        |
|               | Iqbal Pittalwala, UCR News                                                                                          | May 2021               |
|               | "UCR accepted into Inclusion, Diversity and Equity Alliance,"                                                       |                        |
|               | Davina Garcia, The Highlander                                                                                       | Nov 2020               |
|               | "Physics and Astronomy joins elite group promoting equity, diversity, and inclusion," Iqbal Pittalwala, UCR News    | Oct. 2020              |
|               | "Teaching: Assessment in a Continuing Pandemic,"                                                                    | 001. 2020              |
|               | Beckie Supiano, The Chronicle of Higher Education                                                                   | Aug 2020               |
|               | "Four professors honored with Senate Faculty Awards","                                                              |                        |
|               | Imran Ghori, Inside UCR                                                                                             | June 2020              |
|               | "What Goes On in a Proton? Quark Math Still Conflicts With Experiments. ,"                                          |                        |
|               | Charlie Wood, Quanta Magazine                                                                                       | May 2020               |
|               | "Get to know 10 early-career theorists," Emily Ayshford Symmetry Magazine                                           | Jul. 2010              |
|               | "Massless particles can't be stopped,"                                                                              | Jul. 2019              |
|               | Massiess particles can't be stopped, Madeleine O'Keefe, Symmetry Magazine                                           | Jul. 2019              |
|               | "How Close Are We to Finding Dark Matter?","                                                                        |                        |
|               | Paige Keipper, Seeker                                                                                               | Mar. 2019              |
|               | "Physics undergraduate student headed to CERN,"                                                                     |                        |
|               | Iqbal Pittalwala, UCR News                                                                                          | Dec. 2018              |
|               | "Get to know 10 early-career theorists,"  Emily Ayshford Symmetry                                                   | lul 2∩18               |

Jul. 2018

Emily Ayshford, Symmetry

|            | Daniel Cossins, New Scientst                                                                                                                                                                                                                                                                                                                                        | Nov. 2018         |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
|            | "Telling the Truth," UCR Magazine,                                                                                                                                                                                                                                                                                                                                  | Nov. 2018         |
|            | "Office Hours: This dark matter expert keeps his office vibe lighthearted," Omar Shamout, UCR Magazine                                                                                                                                                                                                                                                              | Nov. 2018         |
|            | "Dark Matter Eludes Particle Physicists," NPR Science Friday                                                                                                                                                                                                                                                                                                        | Jun. 2018         |
|            | "What's the Universe Made of?,"<br>Nova Wonders Season 45 Episode 106                                                                                                                                                                                                                                                                                               | May 2018          |
|            | "Nova Wonders Asks 'What's the Universe Made Of' Tonight,"<br>Sarah Lewin, Space.com & Facebook Live interview                                                                                                                                                                                                                                                      | May 2018          |
|            | "Nova Wonders Episode to Feature UCR Expert on Dark Matter," Iqbal Pittalwala, UCR Today                                                                                                                                                                                                                                                                            | Apr. 2018         |
|            | "Physicists Win Two Awards at Science Hack Day," Iqbal Pittalwala, UCR Today                                                                                                                                                                                                                                                                                        | Oct. 2017         |
|            | "UCR physicists win 'Best in Show' and 'Most Whimsical' at Science Hack Day," Cydney Contreras, The Highlander                                                                                                                                                                                                                                                      | Oct. 2017         |
|            | "Generation: First,"<br>UCR Magazine (Vol 13, No. 1)                                                                                                                                                                                                                                                                                                                | Win. 2018         |
|            | "Protophobic Fifth-Force Interpretation of the Observed Anomaly in <sup>8</sup> Be,"                                                                                                                                                                                                                                                                                |                   |
|            | Altmetric attention score: 977 Top 5% of all research outputs, #5 output from <i>Phys. Rev. Lett.</i> , 99th percentile for outputs of t same age and source.                                                                                                                                                                                                       | Aug. 2016<br>he   |
|            | "Nuclear Puzzle May Be Clue to Fifth Force," Sean Nelson, UCR Today                                                                                                                                                                                                                                                                                                 | Aug. 2016         |
|            | "Meet Philip "Flip" Tañedo,"<br>Pinoy Scientists                                                                                                                                                                                                                                                                                                                    | June 2016         |
|            | "One Higgs is the loneliest number,"                                                                                                                                                                                                                                                                                                                                |                   |
|            | Katie Elyce Jones, Symmetry Magazine                                                                                                                                                                                                                                                                                                                                | July 2015         |
|            | "Hard times for theorists in a post-Higgs world,"                                                                                                                                                                                                                                                                                                                   |                   |
|            | Andrew Grant, Science News                                                                                                                                                                                                                                                                                                                                          | June 2013         |
| REFEREEING | Referee: Physics Review D (APS)                                                                                                                                                                                                                                                                                                                                     | 2014 – 2023       |
|            | Referee: Journal of High Energy Physics                                                                                                                                                                                                                                                                                                                             | 2020 – 2022       |
|            | Referee: Physics Letters B                                                                                                                                                                                                                                                                                                                                          | 2022              |
|            | Referee: European Physical Journal C (Springer)                                                                                                                                                                                                                                                                                                                     | 2014, 2017 – 2018 |
|            | Referee: Physics of the Dark Universe (Elsevier)                                                                                                                                                                                                                                                                                                                    | 2013, 2015, 2023  |
|            | Referee: Annals of Physics (Elsevier) Referee: Europhysics Letters (EPS)                                                                                                                                                                                                                                                                                            | 2013              |
|            |                                                                                                                                                                                                                                                                                                                                                                     |                   |
| BERVICE    | Member: High Energy Physics Advisory Panel (HEPAP) Advises the Federal Government on the national program in high energy physics. The panel chartered by the Department of Energy and reports directly to the Associate Director, Office High Energy Physics, Office of Science (DOE), and the Assistant Director, Mathematical & Physic Sciences Directorate (NSF) | of                |
|            | Reviewer: Loyola University Chicago Invited confidential evaluation for a promotion to tenure                                                                                                                                                                                                                                                                       | 2023              |
|            | Reviewer: Whitman College Faculty Personnel Committee Invited confidential reviewer for a promotion to full professor                                                                                                                                                                                                                                               | 2023              |

"Particles crossing to our world could open portal to dark-matter realm,"

| (Vice-)Chair: APS DPF JJ and Noriko Sakurai Dissertation Committee Vice-chair (2023-24) and then chair (2024-25) of selection committee for the American Physical Society's Division of Particles and Fields                                                                                                                                                                                                       | 2023 – 2025                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Reviewer: UC HBCU Initiative In-person review committee for University of California                                                                                                                                                                                                                                                                                                                               | 2023                                                                                  |
| Reviewer: DOE HEP Theory Comparative Review  Mail-in reviewer for the Department of Energy's Office of Science                                                                                                                                                                                                                                                                                                     | 2023                                                                                  |
| Panelist: UC President's Postdoctoral Fellowship Program Panel review for Mathematics, Engineering, and Physical Sciences                                                                                                                                                                                                                                                                                          | 2023                                                                                  |
| Reviewer: NSERC Discovery Grant Review for the Natural Sciences and Engineering Research Council of Canada.                                                                                                                                                                                                                                                                                                        | 2022                                                                                  |
| <b>Liaison:</b> Theory/Cosmic Frontier, Snowmass 2022 Community Planning Exercise Decadal study to identify a scientific vision for the future of particle of physics in the US.                                                                                                                                                                                                                                   | 2020 – 2022                                                                           |
| Panelist: DOE FY22 HEP Intensity Frontier University Comparative Review Reviewer: DOE FY22 HEP Intensity Frontier University Comparative Review Off-Site Reviewer: UC President's Postdoctoral Fellowship Program Finalist Interviewer: Paul & Daisy Soros Fellowships for New Americans Physics Reader: Paul & Daisy Soros Fellowships for New Americans Organizing Committee: AIP Communicating Science Workshop | 2021 - 2021<br>2021 - 2021<br>2018 - 2021<br>2020, 2022<br>2018 - 2021<br>2018 - 2019 |
| Faculty Research Video: UCR University Relations Video Department Invited to present a one-minute summary of my research, shared on UCR Communications platforms.                                                                                                                                                                                                                                                  | Aug. 2023                                                                             |
| Advisory Committee: Advancement and Retention in Academe (ARA)  Oversight for a UCR CNAS faculty mentoring program supported by a UCOP Advancing Faculty Diversity grant. Pl: Patty Springer, director: Linda Walling                                                                                                                                                                                              | 2023 –                                                                                |
| Member: Diversity, Equity & Inclusion Climate Council Committee led by Vice Chancellor and Chief Diversity Officer for campus equity.                                                                                                                                                                                                                                                                              | 2023 –                                                                                |
| Equity Advisor: UCR College of Natural and Agricultural Sciences  Works with the Office of DEI and the dean to provide leadership in matters of equity, diversity, and inclusion for faculty recruitment and retention and graduate success.                                                                                                                                                                       | 2022 –                                                                                |
| <b>Workshop:</b> UCR Science to Policy Certificate Program, communicating your science Workshop on effective science communication as an early-career academic                                                                                                                                                                                                                                                     | Sep. 2022                                                                             |
| Panel: CNAS welcome for new undergraduate students  Presentation and panel discussion for incoming first year and transfer students.                                                                                                                                                                                                                                                                               | Sep. 2022                                                                             |
| Reviewer: UCR Research & Economic Development NSF CAREER internal review Internal feedback for UCR NSF CAREER proposals.                                                                                                                                                                                                                                                                                           | Jun. 2022                                                                             |
| Panelist: CNAS/Black Study Initiative Roundtable Invited panel to discuss potential interactions and synergies between faculty, students, and staff in CNAS and the Black Study Initiative at UCR                                                                                                                                                                                                                  | May 2022                                                                              |
| <b>Moderator</b> : After Grad: Academic Pathways Week Keynote Panel, UCR GradSuccess Invited moderator for a panel of first-generation UC faculty.                                                                                                                                                                                                                                                                 | Nov. 2021                                                                             |
| Committee: UCEAP 3-year Summer Physics Program Review (UC Systemwide)  Speaker: UCR Science to Policy Certificate Program  Led discussion and workshop on social media as an academic.                                                                                                                                                                                                                             | 2019 – 2020<br>2018                                                                   |
| Mentor: UCR Graduate Student Mentoring Program Organized by UCR Graduate Division; mentees listed below.                                                                                                                                                                                                                                                                                                           | 2017 – 2018                                                                           |
| <b>Discussion leader:</b> UCR GradEdge/JumpStart summer journal club Led a journal club to prepare incoming under-represented minority grad students.                                                                                                                                                                                                                                                              | 2017                                                                                  |
| Media contact: UCR Experts on Demand                                                                                                                                                                                                                                                                                                                                                                               | 2016                                                                                  |

UNIVERSITY SERVICE

| DEPARTMENT<br>COMMITTEES  | Fall Chair: Colloquium Committee  Coordinating and organizing fall quarter colloquia.                                                                                                                  | 2023 – 2024             |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
|                           | Faculty Editor: Hiring Committee: Advancing Faculty Diversity Stepped down due to COVID-19 family care commitments                                                                                     | 2019 – 2020             |
|                           | Chair: Website & Display Overhaul and maintenance of department's digital identity.                                                                                                                    | 2017 –                  |
|                           | Outreach                                                                                                                                                                                               | 2017 – 2018             |
|                           | Graduate Diversity                                                                                                                                                                                     | 2017 - 2021             |
|                           | Department Climate Committee Organizes department town halls.                                                                                                                                          | 2021 –                  |
|                           | Co-Chair: Summer Academy for HS teachers  NSF-sponsored program for local physics high school teachers. Designed and initiated equity in physics book club component in 2019.                          | 2016 – 2018             |
|                           | Faculty Hiring Committee: Early Universe                                                                                                                                                               | 2016 – 2017             |
|                           | Chair: Open House Committee Led department participation in Riverside Long Night of Arts & Innovation 2017 and 2019; led department open house in conjunction with UCR Discovery Day in 2016 and 2017. | 2016 – 2022             |
|                           | UCR-CC Bridge                                                                                                                                                                                          | 2016 – 2017             |
|                           | Ernest Ma Retirement Symposium                                                                                                                                                                         | 2016 – 2017             |
|                           | Undergraduate Advising Included advising 9 undergraduate physics majors during this time.                                                                                                              | 2016 – 2018             |
| DEPARTMENT<br>SERVICE     | Organizer: UCR Physics & Astronomy Spring Town Hall Part of a series of town halls to improve the graduate student climate. This was moved to the auspices of the climate committee.                   | May 2022                |
|                           | Organizer: Department Un-Town Hall Small, informal meetings between department stakeholders to improve the department climate.                                                                         | 2022                    |
|                           | Speaker: Diversity, Equity, and Inclusion (UCR Physics 401 Professional Development) Organizer: APS IDEA: UCR Team Lead American Physical Society network of teams to improve institutional equity.    | Feb 2022<br>2020 - 2022 |
|                           | <b>Co-Founder, Advisor:</b> Physics Organization for Womxn and the Underrepresented Inclusive women-in-physics group to support under-represented students.                                            | 2018 –                  |
|                           | Social Media: Particle Theory Twitter (@UCR_HEP_Theory)                                                                                                                                                | 2017 – 2022             |
|                           | Organizer: UCR Physics Hack Day Weekend student hackathon for digital science projects.                                                                                                                | 2016 – 2017             |
| NON-UNIVERSITY<br>SERVICE | Moderator: Victoria Reyes in conversation with Flip Tanedo Moderator for a discussion with Prof. Victoria Reyes on her new book, Academic Outsider. Hosted by Cellar Door Bookstore.                   | Oct. 2022               |
| MENTORING                 | APS National Mentoring Community: Matthew Lugatiman                                                                                                                                                    | 2022 –                  |
|                           | APS National Mentoring Community: Peter Carney                                                                                                                                                         | 2022 –                  |
|                           | Cientifico Latino Mentoring Program: George Iskander                                                                                                                                                   | 2019 – 2020             |
|                           | APS National Mentoring Community: Sergio Garcia                                                                                                                                                        | 2018 – 2019             |
|                           | UCR Graduate Student Mentoring Program Pak Kau Lim, Yawei Qin, Joshua Raimist, Lexi Costantino, Nicholas Goman, Yunxiao Li                                                                             | 2017 – 2018             |
|                           | Paul & Daisy Soros Fellowship for New Americans: Laura Cheng                                                                                                                                           | 2017 – 2018             |
|                           |                                                                                                                                                                                                        |                         |

OUTREACH

Ask a Scientist: Sanford Underground Research Facility

2023

|                | Organizer: Physical & Natural Science Book Club (Cellar Door Bookstore)  Monthly discussion of popular science books with members of the community | 2016 –      |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
|                | Featured Scientist: STEM Trading Cards, Science Delivered                                                                                          | 2020 – 2021 |
|                | Science Pen-Pal: Letters to a Pre-Scientist program                                                                                                | 2019 – 2020 |
|                | Penl-Pal with a junior high student for one year.                                                                                                  | 2010 2020   |
|                | Organizer: UCR Summer Physics Teacher Academy, Women In Physics Book Club                                                                          | 2019 – 2020 |
|                | Adoptee: $\Sigma\Pi\Sigma$ Adopt-A-Physicist program                                                                                               | 2018 – 2019 |
|                | Discussion leader: UC President's Fellowship Spring Retreat; career navigation                                                                     | 2017        |
|                | Science Ambassador: Science Hack Day San Francisco                                                                                                 | 2015        |
|                | One of six invited scientists sponsored by Gordon & Betty Moore Foundation                                                                         |             |
|                | Blogger, organizer, editor: ParticleBites, a research digest Leads team of students who write about physics for the public.                        | 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 SPLASH! and SHEP high school courses on particle physics                                                                    | 2005        |
|                |                                                                                                                                                    |             |
| PUBLIC TALKS & | "Scotohylology," Ologies podcast interview by Alie Ward; rebroadcast on RadioLab                                                                   | Feb. 2023   |
| PANELS         | "Little Particles in a Big Universe," virtual talk at FilSciHub, Philippines (remote)                                                              | Oct. 2022   |
|                | "Year of ParticleBites," virtual talk at Sustainable HEP 2nd ed., CERN (remote)                                                                    | Sep. 2022   |
|                | "Explainer Videos: scalable, inclusive, and metacognitive assessment,"                                                                             | 00p. 2022   |
|                | Contributed talk at the APS April Meeting 2022, New York, NY                                                                                       | Apr. 2022   |
|                | "Pursuing Diversity and Inclusion as an Early Career Scientist,"                                                                                   |             |
|                | Invited talk at the APS April Meeting 2022, New York, NY                                                                                           | Apr. 2022   |
|                | "Popular book discussions: a platform for equity in physics," doi:10.26081/K6J330                                                                  |             |
|                | KITP Teachers' Conference: Neutrinos and New Physics, Santa Barbara, CA                                                                            | Mar. 2022   |
|                | "#PhysicsMeetup: Little Particles in a Big Universe," (video) ICTP Physics Without Frontiers: Philippines                                          | Jul. 2021   |
|                | Panel: "Physics Education,"                                                                                                                        |             |
|                | UCR Summer Physics Teacher Academy                                                                                                                 | Jun. 2021   |
|                | "Non-Traditional Assessment & Inclusivity in Physics,"                                                                                             |             |
|                | UCR Summer Physics Teacher Academy                                                                                                                 | Jun. 2021   |
|                | "The Secret Syllabus: Unwritten Rules for a Physics Major,"                                                                                        |             |
|                | Invited talk, Physics 39 (1st year physics majors), UCR                                                                                            | Nov. 2020   |
|                | "Radio Physics," Invited interviewee, KDNK Community Radio, Aspen, CO                                                                              | Jun. 2019   |
|                | Panel organizer: "The Only Woman in the Room book club discussion" UCR Summer Physics Teacher Academy                                              | 2019, 2022  |
|                | "Finding Your Voice: Storytelling Lessons for Scientists"                                                                                          |             |
|                | 2019 AAAS Meeting, invited panel from Science Friday; Washington DC                                                                                | Feb. 2019   |
|                | "Attending to Diversity In the Physics Classroom" UCR Summer Physics Teacher Academy Conference                                                    | Feb. 2019   |
|                | "How to Fail as a Physics Major,"                                                                                                                  |             |
|                | Invited talk, Physics 39 (1st year physics majors), UCR                                                                                            | Nov. 2019   |
|                | Invited talk, Physics 39 (1st year physics majors), UCR                                                                                            | Nov. 2018   |
|                | "Impostor Syndrome and Failure in College" UCR Society of Physics Students                                                                         | Oct. 2018   |
|                | "My New American Story"                                                                                                                            |             |
|                | Paul & Daisy Soros Fellowships for New Americans Fall Conference Story Slam                                                                        | Oct. 2018   |
|                | "The Physics of Star Wars"                                                                                                                         |             |
|                | UCR ARTSblock film screening and discussion                                                                                                        | May 2018    |
|                | "Breaking into Academia"  LICE TRIO Scholars Program                                                                                               | A== 0010    |
|                | UCR TRIO Scholars Program                                                                                                                          | Apr. 2018   |

|               | "First-Gen Day Faculty Panel"                                                                                                                          |                        |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
|               | UCR First Generation Friday Panel                                                                                                                      | Jan. 2018              |
|               | "Surviving the Academic Job Market"                                                                                                                    |                        |
|               | UCR Grad Success Panel                                                                                                                                 | Nov. 2017              |
|               | "First Generation Academics"                                                                                                                           |                        |
|               | UCR Grad Success Panel                                                                                                                                 | Nov. 2017              |
|               | "I have no idea: A guide to finding your way in science"                                                                                               |                        |
|               | Invited talk, Physics 39 (1st year physics majors), UCR<br>Middle School Symposium talk, Riverside STEM Academy                                        | Nov. 2020<br>Sep. 2017 |
|               | High School Symposium talk, Riverside STEM Academy                                                                                                     | Sep. 2017              |
|               | "Quantum Electrodynamics with Feynman Diagrams"                                                                                                        | ·                      |
|               | UCR Summer Physics Teacher Academy                                                                                                                     | Jun. 2017              |
|               | "Applying to Graduate School"                                                                                                                          |                        |
|               | UCR Society of Physics Students                                                                                                                        | May 2017               |
|               | "Communicating through Social Media"                                                                                                                   |                        |
|               | Communicating Science: San Diego, Invited Panelist                                                                                                     | Sep. 2016              |
|               | "Data vs. Dark Matter: Opportunities for Open Science in Particle Physics"  Science Heels Day, San Francisco (Cordon & Patty Moore Science Ambassador) | Oct 0015               |
|               | Science Hack Day, San Francisco (Gordon & Betty Moore Science Ambassador)  "Palameira auritima accum discontation and finding a most dea mosition"     | Oct. 2015              |
|               | "Balancing writing your dissertation and finding a postdoc position" Panelist, UCI Graduate Division & ADVANCE Program                                 | Nov. 2014              |
|               | "Here be dragons: [fairy] tales from beyond the Standard Model"                                                                                        | 1404. 2011             |
|               | Cornell Society of Physics Students                                                                                                                    | Apr. 2013              |
|               | "The Physics of Angels & Demons"                                                                                                                       |                        |
|               | Cornell Institute for Physics Teachers                                                                                                                 | Jul. 2009              |
|               | "Applying for Graduate Fellowships Information Session"                                                                                                |                        |
|               | Panelist, Cornell Physics Department                                                                                                                   | Oct. 2008              |
|               | "Quantum penguins hint at the nature of matter and antimatter"                                                                                         | NA 0000                |
|               | Marshall Aid Commemoration Commission Colloquium, London, UK                                                                                           | May 2008               |
| DUD OTUDENTO  | Debent Cleaner Westing Dl. Destudent from Course (Advisor Charles Holon)                                                                               | 0000                   |
| PHD STUDENTS  | Robert Clemenson, Visiting Ph.D student from Sussex (Advisor: Stephan Huber)                                                                           | 2022                   |
|               | Yash Aggarwal, Ph.D student, UC Riverside (co-advisor: Anson D'Aloisio) Alexandria Costantino, Ph.D student, UC Riverside                              | 2019 –<br>2018 – 2022  |
|               | Adam Green, Ph.D student, UC Riverside                                                                                                                 | 2018 – 2022            |
|               | Kuntal Pal, Ph.D student, UC Riverside (co-advisor: Jose Wudka)                                                                                        | 2018 – 2023            |
|               | Ian Chaffey, Ph.D student, UC Riverside                                                                                                                | 2010 - 2023            |
|               | ian Chaney, 1 n.D student, OC Inverside                                                                                                                | 2017 – 2022            |
| POSTDOCTORAL  | Daneng Yang, Postdoctoral Scholar, UC Riverside (primary mentor: Hai-Bo Yu)                                                                            | 2021 –                 |
| SCHOLARS      | Aniket Joglekar, Postdoctoral Scholar, UC Riverside (primary mentor: Yanou Cui)                                                                        | 2017 – 2020            |
|               | Ran Huo, Postdoctoral Scholar, UC Riverside                                                                                                            | 2016 – 2018            |
|               | Tall 1140, 1 osodociolai scholar, e e revelside                                                                                                        | 2010 2010              |
| UNDERGRADUATE | Matthew Lugatiman, undergraduate researcher, UC Riverside                                                                                              | 2022 –                 |
| STUDENTS      | Cecelia Ngo, undergraduate researcher, UC Riverside                                                                                                    | 2022 -                 |
|               | Sagada Penano (Stanford University), Summer Research Student                                                                                           | 2020 - 2021            |
|               | Sergio Garcia, APS National Mentoring Community, UC Riverside                                                                                          | 2018 – 2019            |
|               | Syris Norelli, undergraduate researcher, UC Riverside                                                                                                  | 2017 – 2018            |
|               | Adam Green, undergraduate researcher/honors advisee, UC Riverside                                                                                      | 2016 – 2017            |
|               | , 6                                                                                                                                                    |                        |
| HS STUDENTS   | Nathan Kang (North Hollywood High School), Research Student                                                                                            | 2022 –                 |
| LIO OTODEINIO | Anagha Satish (Redlands High School), Summer Research Student                                                                                          | 2022 - 2021            |
|               |                                                                                                                                                        | 2020 2021              |

| QUALIFYING EXAM | Non-Chair member of the UCR qualifying exam committee for the following students |           |
|-----------------|----------------------------------------------------------------------------------|-----------|
|                 | Rahul Rajkumar (Mathematics)                                                     | Jan. 2024 |
|                 | Jialin Wang (Mathematics)                                                        | May 2023  |
|                 | Elliott Vest (Mathematics)                                                       | Nov. 2022 |
|                 | Erik Lloyd                                                                       | Oct. 2021 |
|                 | Gerardo Alvarez                                                                  | Nov. 2019 |
|                 | Andrew Birkey (Earth Sciences)                                                   | Oct. 2019 |
|                 | Michael Shamma                                                                   | Nov. 2019 |
|                 | Amartya Mitra                                                                    | Sep. 2017 |
|                 | Lydia Elias                                                                      | Sep. 2017 |
|                 | Tao Ren                                                                          | Sep. 2016 |
|                 |                                                                                  |           |
| PHD DEFENSE     | Non-Chair member of the UCR dissertation committee for the following students    |           |
|                 | Gerardo Alvarez                                                                  | Sep. 2021 |
|                 | Michael Shamma                                                                   | Oct. 2019 |
|                 | Tao Ren                                                                          | Sep. 2019 |
|                 | Mohammareza Zakeri                                                               | Jun. 2017 |