

Stefania Gori, Complete CV

Contact Details

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Education & Employment

- July 2024 - now** Professor, UC Santa Cruz, Physics Department
- July 2022 - July 2024** Associate Professor, UC Santa Cruz, Physics Department
- Sept. 2018 - June 2022** Assistant Professor, UC Santa Cruz, Physics Department
- Jan. 2016 - Aug. 2018** Assistant Professor, McMicken College of Arts and Sciences,
Physics Department, University of Cincinnati.
- Sept. 2013 - Dec. 2015** Postdoctoral Researcher,
Perimeter Institute for Theoretical Physics.
Advisors Prof. M. Pospelov, P. Schuster, N. Toro.
- Sept. 2010 - Sept. 2013** Postdoctoral Research Fellow,
The University of Chicago & Argonne National Laboratory.
Advisor Prof. C. E. M. Wagner.
- July 2010** PhD in Theoretical Particle Physics at Technical University Munich,
title thesis: *“Randall-Sundrum Models vs. Supersymmetry:
the Different Flavor Signatures”*,
Supervisor Prof. A. J. Buras.
- Oct. 2008** Licence at Scuola Normale Superiore of Pisa,
final score 70/70 cum laude,
title thesis: *“Flavor physics in warped extra dimension
with custodial protection”*,
Supervisor Prof. R. Barbieri.
- July 2007** Master Degree in Theoretical Physics at University of Pisa,
final score 110/110 cum laude,
title thesis: *“Supersymmetry without a light Higgs boson”*,
Supervisor Prof. R. Barbieri.
- July 2005** Bachelor Degree in Physics at University of Pisa,
final score 110/110 cum laude,
title thesis: *“Photonic Crystals”*,
Supervisor Prof. G. La Rocca.

Research Interests

- Unveil the origin of dark matter;
- Address the strong CP problem;
- Elucidate the origin of the matter - antimatter asymmetry of the Universe;
- Understand emergent phenomena in quantum field theory and cosmology.
- Flavor Models, CP Violation, and Neutrino Physics

Grants, Awards & Prizes

- Visiting Miller Research Professor Award at the University of California at Berkeley, Fall 2026;
- 2025 American Physical Society (APS) Fellow;
- 2024 Frontiers of Science Award in Theoretical Physics;
- Co-Principal Investigator, Department of Energy group grant. Title: “Research in Particle Physics, theory.” Four PIs. \$1,512,000 for the year 2023-2026;
- PI of Department of Energy Comparative Review Funding Award. Title “Exploring the Higgs and hidden sectors”, \$100,000 for the year 2022-2023;
- PI of National Science Foundation CAREER award. Title: “Higgs and dark sectors”, \$400,000 for the years 2017 - 2022;
- CERN Marie-Curie COFUND fellow for the years 2013 - 2016 (declined);
- Marie-Curie PhD Fellowship for the academic years 2008 - 2010;
- Scholarship at the Scuola Normale of Pisa for master studies 2005 - 2007.

Sabbaticals & Extended Visits

- Visiting Miller Research Professor Award at the University of California at Berkeley, Fall 2026;
- Lawrence Berkeley National Laboratory affiliate, March - June 2023

Publications in Refereed Journals and Preprints

Bibliometrics data according to INSPIRE on 02/06/2026: **8** renowned papers (more than 500 citations), **12** famous papers (more than 250 citations), and **18** very well-known papers (more than 100 citations); 17,465 citations overall, 156 citations per paper, total h-index **58**. Authors in alphabetic order.

- [66] *Exploring Invisible New Physics with Exotic Pion Decays*,
W. Altmannshofer, J. Dror, P. Giffin, S. Gori, O. Jackson, K. Luong, P. Schwendimann, S. R. Seo
arXiv: 2601.06254 [hep-ph] (cited 1 time).
- [65] *Axiverse Baryogenesis*,
P. Asadi, D. Cyncynates, S. Gori
arXiv: 2511.15794 [hep-ph], to be submitted to Phys. Rev. Lett. (cited 1 time).
- [64] *Sweeping the pion chimney for axion-like particles with KOTO*,
R. Balkin, S. Gori, D. Robinson, C. Scherb
arXiv: 2508.08402 [hep-ph] (cited 1 time).
- [63] *Probing CP and flavor violation in neutral kaon decays with ALPs*,
R. Balkin, S. Gori, C. Scherb
JHEP **02** (2026) 011 [arXiv: 2507.01947 [hep-ph]] (cited 1 time).
- [62] *Spin-Dependent Scattering of Sub-GeV Dark Matter: Models and Constraints*,
S. Gori, S. Knapen, T. Lin, P. Munbodh, B. Suter
Phys. Rev. D **112** (2025) 7, 075019 [arXiv: 2506.11191 [hep-ph]] (cited 6 times).

- [61] *Targets for Flavor-Violating Top Decay*,
W. Altmannshofer, Z. Balme, C. M. Donohue, S. Gori, S. V. Mukundhan
JHEP **08** (2025) 191 [arXiv: 2504.18664 [hep-ph]] (cited 3 times).
- [60] *Discovery Prospects for a Minimal Dark Matter Model at Cosmic and Intensity Frontier Experiments*,
A. Alenezi, C. Cesarotti, S. Gori, J. Shelton
arXiv: 2504.00077 [hep-ph], accepted for publication in JHEP (cited 5 times).
- [59] *Majorana phases beyond neutrinoless double beta decay*,
A. Dery, S. Gori, Y. Grossman, Z. Ligeti
JHEP **10** (2024) 100 [arXiv: 2406.18647 [hep-ph]] (cited 2 times).
- [58] *Diphoton Signals of Muon-philic Scalars at DarkQuest*,
N. Blinov, S. Gori, N. Hamer,
Phys. Rev. D **110** (2024) 7, 075006 [arXiv: 2405.17651 [hep-ph]] (cited 11 times).
- [57] *QCD Axion-Mediated Dark Matter*,
J. Dror, S. Gori, P. Munbodh,
JHEP **09** (2023) 128 [arXiv: 2306.03145 [hep-ph]] (cited 27 times).
- [56] *UV physics from IR features: New prospects from top flavor violation*,
W. Altmannshofer, S. Gori, B. V. Lehmann, J. Zuo,
Phys. Rev. D **107** (2023) 9, 095025 [arXiv: 2303.00781 [hep-ph]] (cited 22 times).
- [55] *Sensitivity of Spin-Precession Axion Experiments*,
J. Dror, S. Gori, J. Leedom, N. Rodd,
Phys. Rev. Lett. **130** (2023) 18, 181801 [arXiv: 2210.06481 [hep-ph]] (cited 31 times).
- [54] *New Opportunities for Detecting Axion-Lepton Interactions*,
W. Altmannshofer, J. Dror, S. Gori,
Phys. Rev. Lett. **130** (2023) 24, 241801 [arXiv: 2209.00665 [hep-ph]] (cited 46 times).
- [53] *Heavy neutral leptons at beam dump experiments of future lepton colliders*,
P. Giffin, S. Gori, Y. Tsai, D. Tuckler,
JHEP **04** (2023) 046 [arXiv: 2206.13745 [hep-ph]] (cited 14 times).
- [52] *Exotic Higgs decays*,
M. Cepeda, S. Gori, V. Martinez Outschoorn, J. Shelton,
Ann. Rev. Nucl. Part. Sci. **72** (2022) 119 [arXiv: 2111.12751 [hep-ph]] (cited 57 times).
- [51] *Dark Matter freeze-in with a heavy mediator: beyond the EFT approach*,
E. Frangipane, S. Gori, B. Shakya,
JHEP **09** (2022) 083 [arXiv: 2110.10711 [hep-ph]] (cited 12 times).
- [50] *Explaining $(g - 2)_\mu$ with Multi-TeV Sleptons*,
W. Altmannshofer, S. A. Gadam, S. Gori, N. Hamer,
JHEP **07** (2021) 118 [arXiv: 2104.08293 [hep-ph]] (cited 43 times).
- [49] *Electron EDM in the complex two-Higgs doublet model*,
W. Altmannshofer, S. Gori, N. Hamer, H. H. Patel,
Phys. Rev. D **102** (2020) no. 11, 115042 [arXiv: 2009.01258 [hep-ph]] (cited 70 times).
- [48] *Dark Scalars and Heavy Neutral Leptons at DarkQuest*,
B. Batell, J. A. Evans, S. Gori, M. Rai,
JHEP **05** (2021) 049 [arXiv: 2008.08108 [hep-ph]] (cited 65 times).

- [47] *KOTO vs. NA62 Dark Scalar Searches*,
S. Gori, G. Perez, K. Tobioka,
JHEP **08** (2020) 110 [arXiv: 2005.05170 [hep-ph]] (cited 84 times).
- [46] *Electric Dipole Moments in a Leptoquark Scenario for the B-Physics Anomalies*,
W. Altmannshofer, S. Gori, H. H. Patel, S. Profumo, D. Tuckler,
JHEP **05** (2020) 069 [arXiv: 2002.01400 [hep-ph]] (cited 38 times).
- [45] *Light Dark Matter from Entropy Dilution*,
J. Evans, A. Ghalsasi, S. Gori, M. Tamaro, J. Zupan,
JHEP **02** (2020) 151 [arXiv: 1910.06319 [hep-ph]] (cited 44 times).
- [44] *Constraining axion-like particles from rare pion decays*,
W. Altmannshofer, S. Gori, D. J. Robinson,
Phys. Rev. D **101** (2020) 7, 075002 [arXiv: 1909.00005 [hep-ph]] (cited 44 times).
- [43] *Neutrino Tridents at DUNE*,
W. Altmannshofer, S. Gori, J. Martin-Albo A. Sousa, M. Wallbank,
Phys. Rev. D **100** (2019) no.11, 115029 [arXiv: 1902.06765 [hep-ph]] (cited 129 times).
- [42] *The second Higgs at the lifetime frontier*,
S. Alipour-Fard, N. Craig, S. Gori, S. Koren, D. Redigolo,
JHEP **07** (2020) 029 [arXiv: 1812.09315 [hep-ph]] (cited 35 times).
- [41] *Wobbly Dark Matter Signals at Cherenkov Telescopes from Long Lived Mediator Decays*,
S. Gori, S. Profumo, B. Shakya,
Phys. Rev. Lett. **122** (2019) no.19, 191103 [arXiv: 1812.08694 [astro-ph-HE]] (cited 12 times).
- [40] *Heavy Higgs as a Portal to the Supersymmetric Electroweak Sector*,
S. Gori, Z. Liu, B. Shakya,
JHEP **1904** (2019) 049 [arXiv: 1811.11918 [hep-ph]] (cited 21 times).
- [39] *Dark Sectors at the Fermilab SeaQuest Experiment*,
A. Berlin, S. Gori, P. Schuster, N. Toro,
Phys. Rev. D **98** (2018) no.3 035011 [arXiv: 1804.00661 [hep-ph]] (cited 231 times).
- [38] *Cosmology and Accelerator Tests of Strongly Interacting Dark Matter*,
A. Berlin, N. Blinov, S. Gori, P. Schuster, N. Toro,
Phys. Rev. D **97** (2018) 055033 [arXiv: 1801.05805 [hep-ph]] (cited 126 times).
- [37] *Looking for the WIMP Next door*,
J. Evans, S. Gori, J. Shelton,
JHEP **1802** (2018) 100 [arXiv: 1712.03974 [hep-ph]] (cited 117 times).
- [36] *The Flavor-locked Flavorful Two Higgs Doublet Model*,
W. Altmannshofer, S. Gori, D. J. Robinson, D. Tuckler,
JHEP **1803** (2018) 129 [arXiv: 1712.01847 [hep-ph]] (cited 35 times).
- [35] *Light resonances and the low- q^2 bin of R_K^** ,
W. Altmannshofer, M. J. Baker, S. Gori, R. Harnik, M. Pospelov, E. Stamou, A. Thamm,
JHEP **1803** (2018) 188 [arXiv: 1711.07494 [hep-ph]] (cited 52 times).
- [34] *Heavy Higgs searches: flavor matters*,
S. Gori, C. Grojean, A. Juste, A. Paul,
JHEP **1801** (2018) 108 [arXiv: 1710.03752 [hep-ph]] (cited 36 times).

- [33] *High scale flavor alignment in two-Higgs doublet models and its phenomenology*,
S. Gori, H. E. Haber, E. Santos,
JHEP **1706** (2017) 110 [arXiv: 1703.05873 [hep-ph]] (cited 69 times).
- [32] *Collider Signatures of Flavorful Higgs Bosons*,
W. Altmannshofer, J. Eby, S. Gori, M. Lotito, M. Martone, D. Tuckler,
Phys. Rev. D **94** (2016) 115032 [arXiv: 1610.02398 [hep-ph]] (cited 84 times).
- [31] *Explaining Dark Matter and B Decay Anomalies with an $L_\mu - L_\tau$ Model*,
W. Altmannshofer, S. Gori, S. Profumo, F. S. Queiroz,
JHEP **1612** (2016) 106 [arXiv: 1609.04026 [hep-ph]] (cited 242 times).
- [30] *Closing the Wedge: Search Strategies for Extended Higgs Sectors with Heavy Flavor Final States*,
S. Gori, I. W. Kim, N. R. Shah, K. M. Zurek,
Phys. Rev. D **93** (2016) 7, 075038 [arXiv: 1602.02782 [hep-ph]] (cited 67 times).
- [29] *On the 750 GeV Di-Photon excess*,
W. Altmannshofer, J. Galloway, S. Gori, A. L. Kagan, A. Martin, J. Zupan,
Phys. Rev. D **93** (2016) 9, 095015 [arXiv: 1512.07616 [hep-ph]] (cited 133 times).
- [28] *The Zbb Couplings at Future e^+e^- Colliders*,
S. Gori, J. Gu, L. T. Wang,
JHEP **1604** (2016) 062 [arXiv: 1508.07010 [hep-ph]] (cited 41 times).
- [27] *Uncovering Mass Generation Through Higgs Flavor Violation*,
W. Altmannshofer, S. Gori, A. L. Kagan, L. Silvestrini, J. Zupan,
Phys. Rev. D **93** (2016) 3, 031301 [arXiv: 1507.07927 [hep-ph]] (cited 114 times).
- [26] *Pseudoscalar Portal Dark Matter*,
A. Berlin, S. Gori, T. Lin, L.T. Wang,
Phys. Rev. D **92** (2015) 015005 [arXiv: 1502.06000 [hep-ph]] (cited 137 times).
- [25] *Illuminating Dark Photons with High-Energy Colliders*,
D. Curtin, R. Essig, S. Gori, J. Shelton,
JHEP **1502** (2015) 157 [arXiv: 1412.0018 [hep-ph]] (cited 472 times).
- [24] *Prospects for Electroweakino Discovery at a 100 TeV Hadron Collider*,
S. Gori, S. Jung, L.T. Wang, J.D. Wells,
JHEP **1412** (2014) 108 [arXiv: 1410.6287 [hep-ph]] (cited 68 times).
- [23] *Supersymmetric custodial Higgs triplets and the breaking of universality*,
M. Garcia, S. Gori, M. Quiros, R. Vega, R. Vega-Morales, T-T. Yu,
Phys. Rev. D **91** (2015) 1, 015016 [arXiv: 1409.5737 [hep-ph]] (cited 33 times).
- [22] *Neutrino Trident Production: A Powerful Probe of New Physics with Neutrino Beams*,
W. Altmannshofer, S. Gori, M. Pospelov, I. Yavin,
Phys. Rev. Lett. **113** (2014) 091801 [arXiv: 1406.2332 [hep-ph]] (cited 509 times).
- [21] *Dressing $L_\mu - L_\tau$ in Color*,
W. Altmannshofer, S. Gori, M. Pospelov, I. Yavin,
Phys. Rev. D **89** (2014) 095033 [arXiv: 1403.1269 [hep-ph]] (cited 508 times).
- [20] *Exotic Decays of the 125 GeV Higgs boson*,
D. Curtin, R. Essig, S. Gori, P. Jaiswal, A. Katz, T. Liu, Z. Liu, D. McKeen, J. Shelton, M. Strassler,
Z. Surujon, B. Tweedie, Y. Zhong,
Phys. Rev. D **90** (2014) 075004 [arXiv: 1312.4992 [hep-ph]] (cited 556 times).

- [19] *Cornering Electroweakinos at the LHC*,
S. Gori, S. Jung, L.T. Wang,
JHEP **1310** (2013) 191 [arXiv: 1307.5952 [hep-ph]] (cited 72 times).
- [18] *Precision Higgs Measurements: Constraints from New Oblique Corrections*,
S. Gori, I. Low,
JHEP **1309** (2013) 151 [arXiv: 1307.0496 [hep-ph]] (cited 31 times).
- [17] *Light Stops, Light Staus and the 125 GeV Higgs*,
M. Carena, S. Gori, N.R. Shah, C.E.M. Wagner, L.T. Wang,
JHEP **1308** (2013) 087 [arXiv: 1303.4414 [hep-ph]] (cited 63 times).
- [16] *Vacuum Stability and Higgs Diphoton Decays in the MSSM*,
M. Carena, S. Gori, I. Low, N.R. Shah, C.E.M. Wagner,
JHEP **1302** (2013) 114 [arXiv: 1211.6136 [hep-ph]] (cited 97 times).
- [15] *A Minimal Flavor Violating 2HDM at the LHC*,
W. Altmannshofer, S. Gori, G.D. Kribs,
Phys. Rev. D **86** (2012) 115009 [arXiv: 1210.2465 [hep-ph]] (cited 128 times).
- [14] *Higgs Couplings and Precision Electroweak Data*,
B. Batell, S. Gori, L.T. Wang,
JHEP **1301** (2013) 139 [arXiv: 1209.6382 [hep-ph]] (cited 110 times).
- [13] *Light Stau Phenomenology and the Higgs gamma-gamma Rate*,
M. Carena, S. Gori, N.R. Shah, C.E.M. Wagner, L.T. Wang,
JHEP **1207** (2012) 175 [arXiv: 1205.5842 [hep-ph]] (cited 211 times).
- [12] *LHC Discovery Potential for Non-Standard Higgs Bosons in the 3b Channel*,
M. Carena, S. Gori, A. Juste, A. Menon, C.E.M. Wagner, L.T. Wang,
JHEP **1207** (2012) 091 [arXiv: 1203.1041 [hep-ph]] (cited 21 times).
- [11] *A 125 GeV SM-like Higgs in the MSSM and the gamma-gamma Rate*,
M. Carena, S. Gori, N.R. Shah, C.E.M. Wagner,
JHEP **1203** (2012) 014 [arXiv: 1112.3336 [hep-ph]] (cited 443 times).
- [10] *Exploring the Higgs Portal with 10/fb at the LHC*,
B. Batell, S. Gori, L.T. Wang,
JHEP **1206** (2012) 172 [arXiv: 1112.5180 [hep-ph]] (cited 118 times).
- [9] *Signals of CP Violation Beyond the MSSM in Higgs and Flavor Physics*
W. Altmannshofer, M. Carena, S. Gori, A. de la Puente,
Phys. Rev. D **84** (2011) 095027 [arXiv: 1107.3814 [hep-ph]] (cited 21 times).
- [8] *W plus two Jets from a Quasi-Inert Higgs Doublet*,
Q.H. Cao, M. Carena, S. Gori, A. Menon, P. Schwaller, C.E.M. Wagner, L.T. Wang,
JHEP **1108** (2011) 002 [arXiv: 1104.4776 [hep-ph]] (cited 37 times).
- [7] *Search for Higgs Bosons in SUSY Cascade Decays and Neutralino Dark Matter*,
S. Gori, P. Schwaller, C.E.M. Wagner,
Phys. Rev. D **83** (2011) 115022 [arXiv: 1103.4138 [hep-ph]] (cited 28 times).
- [6] *Solving the μ Problem with a Heavy Higgs Boson*,
R. Franceschini, S. Gori,
JHEP **1105** (2011) 084 [arXiv: 1005.1070 [hep-ph]] (cited 32 times).

- [5] *Higgs-mediated FCNCs: Natural Flavor Conservation vs. Minimal Flavor Violation*,
A.J. Buras, M.V. Carlucci, S. Gori, G. Isidori,
JHEP **1010** (2010) 009 [arXiv: 1005.5310 [hep-ph]] (cited 267 times).
- [4] *Anatomy and Phenomenology of FCNC and CPV Effects in SUSY Theories*,
W. Altmannshofer, A.J. Buras, S. Gori, P. Paradisi, D.M. Straub,
Nucl. Phys. B **830** (2010) 17 [arXiv: 0909.1333 [hep-ph]] (cited 268 times).
- [3] *The Impact of Kaluza Klein Fermions on Standard Model Fermion Couplings in a RS Model with Custodial Protection*,
A.J. Buras, B. Duling, S. Gori,
JHEP **0909** (2009) 076 [arXiv: 0905.2318 [hep-ph]] (cited 96 times).
- [2] *Rare K and B Decays in a Warped Extra Dimension with Custodial Protection*,
M. Blanke, A.J. Buras, B. Duling, K. Gemmler, S. Gori,
JHEP **0903** (2009) 108 [arXiv: 0812.3803 [hep-ph]] (cited 250 times).
- [1] $\Delta F = 2$ *Observables and Fine - Tuning in a Warped Extra Dimension with Custodial Protection*,
M. Blanke, A.J. Buras, B. Duling, S. Gori, A. Weiler,
JHEP **0903** (2009) 001 [arXiv: 0809.1073 [hep-ph]] (cited 286 times).

Conference Proceedings and Reports

- **Snowmass Reports**

- [15] *Statement from the American Linear Collider Committee to the P5 subpanel*,
J. A. Bagger et.al.,
arXiv: 2304.10299 [hep-ph].
- [14] *Snowmass 2021 Dark Matter Complementarity Report*,
A. Boveia et.al.,
arXiv: 2211.07027 [hep-ex].
- [13] *Report of the Frontier For Rare Processes and Precision Measurements*,
M. Artuso, R. H. Bernstein, A. A. Petrov et.al.,
arXiv: 2210.04765 [hep-ex].
- [12] *Snowmass 2021 Cross Frontier Report: Dark Matter Complementarity (Extended Version)*,
A. Boveia et.al.,
arXiv: 2210.01770 [hep-ph].
- [11] *Dark Sector Physics at High-Intensity Experiments*,
S. Gori, M. Williams et.al.,
arXiv: 2209.04671 [hep-ph].
- [10] *Experiments and Facilities for Accelerator-Based Dark Sector Searches*,
P. Ilten, N. Tran et.al.,
arXiv: 2206.04220 [hep-ex].
- [9] *Strategy for Understanding the Higgs Physics: The Cool Copper Collider*,
S. Dasu et.al.,
arXiv: 2203.07646 [hep-ex].
- [8] *DarkQuest: A dark sector upgrade to SpinQuest at the 120 GeV Fermilab Main Injector*,
A. Apyan et.al.,
arXiv: 2203.08322 [hep-ex].
- [7] *The International Linear Collider: Report to Snowmass 2021*,
ILC International Development Team, A. Aryshev et.al.,
arXiv: 2203.07622 [physics.acc-ph].

- [6] *Testing Lepton Flavor Universality and CKM Unitarity with Rare Pion Decays in the PIONEER experiment*,
PIONEER Collaboration, W. Altmannshofer et.al.,
arXiv: 2203.05505 [hep-ex].
- [5] *Physics Opportunities for the Fermilab Booster Replacement*,
J. Arrington et.al.,
arXiv: 2203.03925 [hep-ph].
- [4] *PIONEER: Studies of Rare Pion Decays*,
PIONEER Collaboration, W. Altmannshofer et.al.,
arXiv: 2203.01981 [hep-ex].
- [3] *New Physics Searches at Kaon and Hyperon Factories*,
E. Goudzovski, et.al.,
Rept. Prog. Phys. **86** (2023) 1, 016201 [arXiv: 2201.07805 [hep-ph]].
- [2] *ILC Study Questions for Snowmass 2021*,
K. Fujii et. al.,
arXiv: 2007.03650 [hep-ph].
- [1] *Higgs Working Group Report of the Snowmass 2013 Community Planning Study*,
S. Dawson, et.al.,
arXiv: 1310.8361 [hep-ph].

• Reports

- [18] *Kaon Physics: A Cornerstone for Future Discoveries*,
J. Aebischer et. al.,
arXiv: 2503.22256 [hep-ph].
- [17] *ACE Science Workshop Report*,
S. Gori et. al.,
arXiv: 2403.02422 [hep-ph].
- [16] *Feebly Interacting Particles: FIPs 2022 workshop report*,
C. Antel et. al.,
arXiv: 2305.01715 [hep-ph].
- [15] *Feebly-Interacting Particles: FIPs 2020 Workshop Report*,
P. Agrawal et. al.,
arXiv: 2102.12143 [hep-ph].
- [14] *Reinterpretation of LHC Results for New Physics: Status and Recommendations after Run 2*,
LHC Reinterpretation Forum Collaboration, W. Abdallah et. al.,
SciPost Phys. 9 (2020) 2, 022 [arXiv: 2003.07868 [hep-ph]].
- [13] *Physics Briefing Book: Input for the European Strategy for Particle Physics Update 2020*,
R. K. Ellis, et. al.,
arXiv: 1910.11775 [hep-ph].
- [12] *Higgs Boson Potential at Colliders: Status and Perspectives*,
B. di Micco, et. al.,
arXiv: 1910.00012 [hep-ph].
- [11] *Higgs Physics at the HL-LHC and HE-LHC*,
HL/HE Higgs Working Group, M. Cepeda, S. Gori, P. Ilten, M. Kado, F. Riva et al.,
arXiv: 1902.00134 [hep-ph].
- [10] *CEPC Conceptual Design Report: Volume 2 - Physics & Detector*,
CEPC study group, J. Guimaraes da Costa et al.,
arXiv: 1811.10545 [hep-ex].

- [9] *LHC Dark Matter Working Group: Next-generation spin-0 dark matter models*,
LHC Dark Matter Working Group, T. Abe et al.,
arXiv: 1810.09420 [hep-ph].
- [8] *Les Houches 2017: Physics at TeV Colliders New Physics Working Group Report*,
G. Brooijmans, et. al.,
arXiv: 1803.10379 [hep-ph].
- [7] *Recommendations of the LHC Dark Matter Working Group: Comparing LHC searches for heavy mediators of dark matter production in visible and invisible decay channels*,
A. Albert, et. al.,
arXiv: 1703.05703 [hep-ph].
- [6] *Handbook of LHC Higgs Cross Sections: 4. Deciphering the Nature of the Higgs Sector*,
D. de Florian, et. al.,
arXiv: 1610.07922 [hep-ph].
- [5] *Dark Sectors 2016 Workshop: Community Report*,
J. Alexander, et.al.,
arXiv: 1608.08632 [hep-ph].
- [4] *Physics at a 100 TeV pp collider: beyond the Standard Model phenomena*,
T. Golling, et.al.,
arXiv: 1606.00947 [hep-ph].
- [3] *A facility to Search for Hidden Particles at the CERN SPS: the SHiP physics case*,
S. Alekhin, et.al.,
arXiv: 1504.04855 [hep-ph].
- [2] *CEPC-SPPC Preliminary Conceptual Design Report. 1. Physics and Detector*,
M. Ahmad, et.al.,
IHEP-CEPC-DR-2015-01.
- [1] *Project X: Physics Opportunities*,
A. Kronfeld (ed.), R.S. Tschirhart (ed.), U. Al-Binni, et.al.,
arXiv: 1306.5009 [hep-ex].

- **Experimental papers**

- [1] *Performance measurements of the electromagnetic calorimeter and readout electronics system for the DarkQuest experiment*,
A. Apyan, et.al.,
2502.20590 [physics.ins-det].

- **Lecture Notes**

- [2] *TASI lectures on flavor physics*,
S. Gori, PoS TASI2018 (2019).
- [1] *Three Lectures of Flavor and CP violation within and Beyond the Standard Model*,
S. Gori,
lectures given at the 2015 European School of High-Energy Physics (ESHEP2015),
arXiv: 1610.02629 [hep-ph].

- **Proceedings**

- [4] *Theory perspective talk at LHCP 2023*,
S. Gori,
LHCP 2023 Closing talk, PoS(LHCP2023)194.

- [3] *Exploration of Beyond the Standard Model Physics at the ILC*,
S. Gori,
DPF 2015 Proceedings, arXiv: 1511.00405 [hep-ph].
- [2] *Predictions of Warped Extra Dimensions for Flavor Phenomenology*,
S. Gori,
AIP.Conf.Proc. **1200** (2010) 635-638 [arXiv: 0909.3042 [hep-ph]].
- [1] *Patterns of Flavor Violation in a Warped Extra Dimensional Model with Custodial Protection*,
S. Gori,
J.Phys.Conf.Ser. **171** (2009) 012062 [arXiv: 0901.4704 [hep-ph]].

Invited Seminars & Colloquia

- 2025**
 - *Dark sector theories at high-intensity accelerator experiments*,
Colloquium given at the University of Arizona, November 21, 2025
 - *The origin of neutrino masses*,
Colloquium given at the University of Kansas, November 17, 2025
Colloquium given at Oklahoma State University, April 24, 2025
Colloquium given at the University of California, Santa Cruz, February 13, 2025
- 2024**
 - *Probing Axions & Dark Matter theories at high-intensity experiments*,
Colloquium given at the University of Washington, November 4, 2024
 - *News from the SpinQuest and DarkQuest experiments*,
Seminar given at the University of Oregon, May 6, 2024
 - *Dark sectors: from theory to accelerator experiments and beyond*,
Colloquium given at Syracuse University, April 11, 2024
- 2023**
 - *New ALP signatures at high intensity experiments*,
Seminar given at the University of Minnesota, November 17, 2023
 - *Dark sectors: from theory to accelerator experiments and beyond*,
Colloquium given at MIT, October 19, 2023
 - *New search opportunities for axion-like-particles*,
Seminar given at Arizona State University, September 27, 2023
Seminar given at Mitchell Institute, Texas A & M University October 26, 2023
 - *New search opportunities for axion & axion-like-particles*,
Seminar given at Technion University, September 14, 2023
 - *Dark sectors: from theory to accelerator experiments and beyond*,
Colloquium given at the Aspen Center for Physics, June 29, 2023
 - *New meson probes of axion-like-particles*,
Research Progress Meeting (RPM) Seminar given at LBNL Berkeley, May 2, 2023
 - *Dark sectors: from theory to accelerator experiments*,
Colloquium given at Brown University, March 6, 2023
 - *New ALP probes from meson decays*,
(Remote) Seminar given at Scuola Normale Superiore of Pisa, February 7, 2023
- 2022**
 - *New ALP probes from light meson decays*,
Particle seminar, Perimeter Institute for Theoretical Physics, November 15, 2022

- *New ALP probes from meson decays*,
SLAC theory seminar, SLAC, November 9, 2022
 - *Higgs and CP violation*,
(Remote) Seminar given at Kings college, London, May 23, 2022
- 2021**
- *Flavorful Higgs bosons and the muon $g-2$* ,
(Remote) Seminar given at Oklahoma State University, November 18, 2021
 - *Hunting Dark Particles Colliders*,
(Remote) Colloquium University of Illinois, Chicago, October 6, 2021
 - *ILC Opportunities for Fixed Target Experiments*,
(Remote) Seminar series on Long Lived Particle searches,
Tokyo Institute of Technology, July 28, 2021
 - *New searches for BSM Higgs bosons*,
(Remote) Seminar given at MIT CMS meeting, April 21, 2021
 - *Probing axion-like-particle effective couplings at Kaon (and other light meson) experiments*,
(Remote) Seminar "All things EFT" series, February 25, 2021
 - *Hunting Dark Particles @ Accelerator Experiments*,
(Remote) Colloquium Colorado State University, February 8, 2021
- 2020**
- *Hunting Dark Particles at Colliders*,
(Remote) Colloquium California State University, Long Beach, October 26, 2020
 - *Axion-like-particles at Kaon experiments*,
(Remote) BSM Pandemic seminar, August 5, 2020
(Remote) joint UCSC / UCI seminar, August 5, 2020
(Remote) Seminar given at BNL, June 24, 2020
 - *Hunting Dark Particles at colliders*,
Colloquium given at Columbia University, March 2, 2020
Colloquium given at UCLA, January 23, 2020
 - *Axion-like-particles at flavor physics experiments*,
Seminar given at MIT, February 24, 2020
- 2019**
- *Axion-like-particles at flavor physics experiments*,
Seminar given at SLAC, December 4, 2019
 - *New accelerator experiments for dark sectors*,
Seminar given at UC Davis, May 20, 2019
Seminar given at Caltech, May 6, 2019
 - *Hunting Dark Matter at collider experiments*,
Colloquium given at UC Berkeley, April 15, 2019
 - *Light Dark Matter and the Higgs portal*,
Colloquium given at Florida State University, March 28, 2019
Colloquium given at UC Riverside, April 4, 2019
 - *With the Higgs into the dark*,
Colloquium given at TRIUMF, January 17, 2019
Colloquium given at Simon Fraser University, January 18, 2019
- 2018**
- *Testing Dark Matter models at the SeaQuest experiment*,
Seminar given at UC Berkeley, December 3, 2018

- *Dark sectors at high energy & at high intensity experiments*,
Seminar given at Rice University, Houston, November 15, 2018
 - *Opportunities for New Physics searches at SeaQuest*,
Wine and cheese seminar, Fermilab, May 25, 2018
 - *Testing Dark Matter models at the SeaQuest experiment*,
Seminar given at the University of Kentucky, March 1, 2018
 - *With the Higgs into the dark*,
Colloquium given at the University of Alabama, January 31, 2018
- 2017**
- *Novel windows into the dark sector*,
Seminar given at Notre Dame University, December 5, 2017
Seminar given at Northwestern University, October 23, 2017
Seminar given at the University of Minnesota, October 20, 2017
 - *The Higgs and the road to new discoveries*,
Colloquium given at the University of Cincinnati, August 31, 2017
 - *Flavor perspective on heavy Higgs searches*,
Seminar given at Indiana University, April 24, 2017
Seminar given at UC Santa Barbara, April 12, 2017
 - *The Higgs and the path to new discoveries*,
Colloquium given at UC Santa Cruz, March 14, 2017
- 2016**
- *Collider signatures of flavorful Higgs bosons*,
Seminar given at Maryland University, December 5, 2016
Seminar given at Brookhaven National Laboratory, October 26, 2016
 - *Non-SUSY extensions - Overview (theory)*,
Heraeus seminar: “The high energy LHC-interplay between new precision measurements and searches for new physics”, Bad Honnef, Germany, October 19, 2016
 - *Signatures of Flavorful Higgs Bosons*,
Topic of the week seminar, Fermilab, August 16, 2016
 - *An exotic Higgs to probe New Physics*,
Seminar given at UC Santa Cruz, February 29, 2016
 - *A flavorful Higgs*,
Seminar given at UT Austin, March 8, 2016
Seminar given at SLAC, Menlo Park, January 27, 2016
- 2015**
- *A flavorful Higgs*,
Seminar given at LBL Berkeley, December 2, 2015
Seminar given at New York University, New York, November 11, 2015
 - *The Higgs as a portal to New Physics*,
Colloquium given at York University, Toronto, October 6, 2015
 - *Higgs and flavor and the LHC*,
Seminar given at the Galileo Galilei Institute, Florence, September 25, 2015
Seminar given at the Scuola Normale of Pisa, Pisa, September 23, 2015
 - *Prospects for Electroweakino discovery at the 100TeV hadron collider*,
Seminar for “Very High Energy pp Collider Physics Studies” (VLHC), April 24, 2015
 - *The Higgs as a portal to New Fundamental Physics*,
Nuclear and Particle Physics Colloquium given at MIT, Boston, April 6, 2015

Colloquium given at Perimeter Institute, Waterloo, April 1, 2015
Colloquium given at SLAC, Menlo Park, March 4, 2015
Colloquium given at University of Michigan, Ann Arbor, January 16, 2015

- *Discovering new particles after the Higgs*,
Colloquium given at Guelph University, Guelph, March 30, 2015
Colloquium given at Carleton University, Ottawa, March 17, 2015
Colloquium given at Northeastern University, Boston, February 23, 2015
Colloquium given at UCLA, Los Angeles, February 20, 2015
Colloquium given at the University of Pittsburgh, Pittsburgh, February 5, 2015

- *Hunting weakly interacting new particles*,
Seminar given at the Northeastern University, Boston, February 23, 2015
Seminar given at the University of Pittsburgh, Pittsburgh, February 6, 2015

- *New Strategies for Higgs Physics*,
Seminar given at Boston University, Boston, February 9, 2015

- 2014**
- *Looking for Dark forces with multi-leptons*,
Seminar given at Rutgers University, November 11, 2014
 - *Neutrino trident as probe of new forces*,
Seminar given at uBooNE Astro-Particle Exotica meeting, Fermilab, November 6, 2014
 - *Multileptons from a dark force*,
Seminar given at Johns Hopkins University, September 16, 2014
 - *High and low energy probes of light Z' bosons*,
Seminar given at SLAC, Menlo Park, May 7, 2014
 - *High and low energy probes of light Z' bosons*,
Seminar given at UC Santa Cruz, May 5, 2014
 - *High and low energy probes of light Z' bosons*,
Seminar given at UC Davis, April 30, 2014
 - *New Physics test for new (and old) oblique corrections*,
Seminar given at University of Oregon, February 7, 2014
 - *Beyond the Higgs discovery*,
Colloquium given at University of Oregon, February 6, 2014
 - *Beyond the Higgs discovery*,
Colloquium given at University of Cincinnati, January 30, 2014

- 2013**
- *Almost invisible electroweakinos*,
HET Brown Bag Series Seminar given at University of Michigan, December 4, 2013
 - *Testing New Physics scales through the Higgs boson*,
Seminar given at the “University of D0”, Fermilab, July 18, 2013
 - *Higgs couplings and electroweak precision data*,
Seminar given at UC Santa Cruz, May 14, 2013
 - *Higgs couplings and electroweak precision data*,
Seminar given at UC Berkeley, April 22, 2013
 - *A metastable vacuum and the Higgs to diphoton rate*,
Seminar given at University of Wisconsin, Madison, March 5, 2013
 - *Higgs and light sleptons*,
Seminar given at Southern Methodist University, February 25, 2013

- *Vacuum structure and the Higgs to di-photon rate*,
Seminar given at UC Irvine, February 20, 2013
 - *Higgs and light sleptons*,
Seminar given at Texas A & M University, February 7, 2013
- 2012**
- *Light sleptons, Higgs phenomenology and the vacuum*,
Seminar given at Perimeter Institute, December 7, 2012
 - *Light sleptons, Higgs phenomenology and the vacuum*,
Seminar given at Northwestern University, December 3, 2012
 - *Light sleptons, Higgs phenomenology and the vacuum of our universe*,
Seminar given at MIT, November 26, 2012
 - *Supersymmetric Higgs bosons at the LHC*,
Seminar given at SLAC, October 3, 2012
 - *Higgs signals in a Minimal Flavor Violating 2HDM*,
Seminar given at UC Santa Cruz, October 1, 2012
 - *Exploring the Higgs portal with the first LHC data*,
Seminar given at Scuola Normale Superiore of Pisa, June 8, 2012
 - *Exploring the Higgs portal with the first LHC data*,
Seminar given at Ecole polytechnique federale de Lausanne, June 5, 2012
 - *Exotic scalars and the SM Higgs boson*,
Seminar given at Yale University, May 1, 2012
 - *Exploring the Higgs portal with the first 10/fb LHC data*,
Seminar given at Argonne National Laboratory, March 6, 2012
 - *Exploring the Higgs portal with 10/fb at the LHC*,
Seminar given at University of Illinois at Chicago, January 30, 2012
- 2011**
- *Signals of CP Violation Beyond the MSSM at the LHC*,
Seminar given at Cornell University, November 16, 2011
 - *Signals of CP Violation Beyond the MSSM in Higgs and Flavor Physics*,
Seminar given at University of Wisconsin, Madison, October 11, 2011
 - *Looking for New Physics in the $B_{s,d} \rightarrow \mu^+ \mu^-$ Decays*,
Seminar given at CDF B physics group, Fermilab, May 26, 2011
 - *Flavor transitions in two Higgs doublet models*,
Seminar given at Brookhaven National Laboratory, May 18, 2011
 - *Higgs mediated flavor changing neutral currents*,
Seminar given at Michigan State University, March 1, 2011
 - *FCNCs in two Higgs doublet models*,
Seminar given at Fermilab, January 27, 2011
- 2009**
- *Warped Extra Dimensions or Susy? How to Discriminate?*,
Seminar given at Argonne National Laboratory, November 24, 2009
 - *A Randall-Sundrum Model testable by LHC*,
Seminar given at University of Chicago, November 23, 2009
 - *Randall-Sundrum vs Susy: Theory & Phenomenology*,
Seminar given at Institut de Fisica d'Altes Energies, Barcelona, November 2, 2009
 - *A Randall-Sundrum Model in the Reach of LHC*,
Seminar given at IAS, June 12, 2009

Invited Talks at Conferences and Workshops

- 2025**
- *The Next Frontiers of Particle Physics: Linking Theory, Experiment, and Other Disciplines*, Beyond Perimeter - Alumni 25th Anniversary Event, Perimeter Institute, Waterloo, Canada, September 24, 2025
 - *Axion-Mediated Dark Matter: Models & Future Experimental Opportunities*, “Charting the Future Symposium”, Perimeter Institute, Waterloo, Canada, August 27, 2025
 - “Particle Physics on the Planes, 2025” meeting, University of Kansas, Lawrence, November 15, 2025
 - *Axion-Mediated Dark Matter: from Models to Experimental Tests*, “Illuminating Dark Matter, 2025”, Simons Symposium, Schloss Elmau, Germany, June 2, 2025
 - *Spinning the search for sub-GeV dark matter direct detection*, Mitchell Conference on Collider, Dark Matter, and Neutrino Physics 2025 Texas A&M University, May 14, 2025
- 2024**
- *Axions beyond the QCD axion*, Talk given at “The International Joint Workshop on the Standard Model and Beyond 2024/3rd Gordon Godfrey Workshop on Astroparticle Physics” University of New South Wales, Sydney, December 11, 2024
 - *Axions beyond the QCD axion*, Talk given at the “About some future directions in fundamental physics” workshop Scuola Normale di Pisa, Italy, November 9, 2024
 - *Dark sector searches with leptons*, Talk given at the 2024 Belle II Physics Week KEK, Tsukuba, Japan, October 15, 2024
 - *Majorana phases beyond neutrinoless double beta decay*, Talk given at “The Dark Side of the Universe, 2024” conference Corfu, September 13, 2024
 - *ALP searches with fixed target experiments*, Talk given at the “The Axion Quest” workshop at the 20th Rencontres du Vietnam Quynhon, Vietnam, August 6, 2024
 - *Exploring the frontier: Theoretical insights into the physics of dark sectors*, **Plenary** talk given at the International Conference on High Energy Physics (ICHEP), 2024 Prague, July 23, 2024
 - *Neutrino Trident Production: A Powerful Probe of New Physics with Neutrino Beams*, Talk given at the 2024 International Congress of Basic Science (ICBS) Beijing, July 16, 2024
 - *Dark photon theory landscape*, Talk given at the CERN “Roadmap of Dark Matter models for Run 3” workshop CERN (remote), May 15, 2024
 - *Dark Matter at accelerators, from MeV to TeV*, Talk given at the APS April meeting Sacramento, April 3, 2024
 - *Big picture questions in particle physics (from theory to experiments)*, Talk given at the Aspen Center for Physics conference “The future of high energy physics: a new generation, a new vision”, Aspen, March 26, 2024

- 2023**
- *What can we learn about new physics through precision experiments?*,
Plenary talk given at the ICFA seminar,
DESY, December 1, 2023
 - *Theory motivation overview*,
Talk given at the DarkQuest collaboration meeting,
Boston University, October 20, 2023
 - *New search opportunities for axion-like-particles*,
Talk given at the SRitp workshop “LUXE physics and SFQED”,
Weizmann Institute, September 11, 2023
 - *New Physics models at the precision & intensity frontiers*,
Talk given at the “Beyond the SM from Colliders to the Early Universe workshop”,
University of Chicago, May 30, 2023
 - *Theory perspective*,
Closing Plenary talk given at the 11th Large Hadron Collider Physics Conference,
Belgrade, May 26, 2023
 - *The high intensity window to axion-like-particles*,
Plenary talk given at PLANCK 2023, Warsaw University, May 22, 2023
 - *Other accelerator-based BSM experiments*,
Talk at the P5 Townhall meeting, Brookhaven National Laboratory, April 12, 2023
 - *New ALP probes from meson decays*,
Talk at the workshop “Lighting New Lampposts for DM & BSM”,
Simons Center for Geometry and Physics, Stony Brook University, March 15, 2023
- 2022**
- *BSM searches at intensity frontier experiments*,
Talk at the 28th IFT Xmas Workshop, Autonomous University of Madrid, December 14, 2022
 - *Dark sectors at Snowmass*,
Talk at HPS collaboration meeting, SLAC, November 6, 2022
 - *BSM and dark sector: introduction*,
Talk at the Vietnam Flavour Physics Conference 2022, ICISE, Quy Nhon, August 19, 2022
 - *Understanding Dark Matter & Dark Sectors at the RP Frontier*,
Plenary talk given at the Seattle Snowmass Summer Meeting, 2022, July 20, 2022
 - *ALPs from light meson decays*,
Talk at the workshop “Summitting the Unknown: New Physics, New Opportunities,
New Voices”, University of Washington, July 15, 2022
 - *Direct and indirect probes of Higgs CP violation*,
(Remote) talk at the LHC Higgs Working Group meeting, June 23, 2022
 - *LLPs at the Rare Processes Frontier*,
(Remote) talk at the 11th workshop of the LLP Community, June 2, 2022
 - *Phenomenology and search strategies*,
(Remote) talk at the “Accelerator-based dark sectors agora”, Fermilab, April 22, 2022
 - *Light Long-Lived Particles: Synergies between EF and RF*,
(Remote) talk given at the Energy Frontier Snowmass workshop, April 1, 2022
 - *Dark sector particles at fixed target experiments*,
Talk given at the “New methods and ideas at the frontiers of particle physics”
Aspen conference, March 22, 2022
 - *The Higgs in the Standard Model & beyond*,
Talk given at the Lake Louise Winter Institute, February 24, 2022

- 2021**
- *Higgs and CP violation*,
(Remote) talk at the “Higgs hunting” meeting, September 20, 2021
 - *Light DM benchmarks: a viewpoint from Snowmass*,
(Remote) talk at Feebly Interacting Particle meeting, CERN, September 15, 2021
 - *Charged Higgs & flavor*,
(Remote) talk at the Charged Higgs workshop, August 31, 2021
 - *Cosmology and accelerator tests of strongly interacting dark matter*,
(Remote) talk at the “20th Lomonosov conference on elementary particle physics”,
Moscow State University, August 24, 2021
 - *ILC Opportunities for Fixed Target Experiments*,
(Remote) talk at Seminar series on Long Lived Particle searches,
Tokyo Institute of Technology, July 28, 2021
 - *Axion-like-particles @ pion experiments*,
(Remote) talk at PIENUX working meeting, June 25, 2021
 - *Flavorful Higgs and the $g-2$* ,
(Remote) talk at the 2021 CERN-CKC Theory Workshop: “BSM physics towards the end
of the pandemic”, June 9, 2021
 - *Testing BSM Physics at the HL-LHC*,
(Remote) talk at the LHCp 2021 conference, Paris, June 7, 2021
 - *The Dark sectors*,
Plenary (Remote) talk at the “PPC 2021: XIV International workshop on interconnections
between Particle Physics and Cosmology”,
the University of Oklahoma, May 17, 2021
 - *The New searches for BSM Higgs bosons*,
(Remote) talk at MIT CMS meeting, April 14, 2021
 - *The Higgs and new BSM physics for Run 3*,
(Remote) talk at the PITT PACC Workshop: LHC physics for Run 3,
University of Pittsburgh, April 7, 2021
 - *Testing the CP nature of the Higgs boson*,
(Remote) talk at the “Higgs as a Probe of New Physics workshop”,
Osaka University, March 26, 2021
 - *Probing axion-like-particle effective couplings at Kaon (and other light meson) experiments*,
(Remote) talk at All things EFT seminar, February 24, 2021
- 2020**
- *Axion like particles at light meson experiments*,
(Remote) talk at the Light Dark World 2020 meeting, Sydney-CPPC, December 15, 2020
 - *High-intensity probes of dark sector particles*,
(Remote) talk at DESY Virtual Theory Forum 2020, September 23, 2020
 - *Scalar portal and its connection to Higgs physics from a theory viewpoint*,
(Remote) talk at FIPs 2020 - Feebly Interacting Particles 2020, CERN, September 4, 2020
 - *The role of flavor in heavy Higgs searches*,
(Remote) talk at the EF02 Snowmass Meeting: Higgs and Flavor, September 3, 2020
 - *RF6 overview*,
(Remote) talk at the RF6 Snowmass kick-off meeting, August 12, 2020
 - *RF6: dark sectors at high intensity*,
(Remote) talk at the Rare Processes and Precision Frontier Snowmass kick-off meeting,
July 27, 2020

- *High energy protons*,
(Remote) talk at the “Booster replacement science opportunities” meeting, Fermilab, May 19, 2020
 - *Phenomenology of beyond the Standard Model*,
(Remote) talk at the APS April meeting, April 19, 2020
- 2019**
- *Dark sectors at accelerator experiments*,
Plenary talk at the “Baryon and Lepton number Violation 2019” conference, Institute for Theoretical Physics (IFT), Madrid, Spain, October 24, 2019
 - *Exotic decays of SM & BSM Higgs bosons*,
Plenary talk at the “Higgs coupling 2019” conference, University of Oxford, October 3, 2019
 - *SpinQuest/DarkQuest*,
Talk at “Hidden Sector Fixed Target Experiments at Fermilab” workshop, Remote talk, September 4, 2019
 - *Novel experiments for axion-like particles*,
Talk at the PACIFIC 2019 conference, Moorea, French Polynesia, September 2, 2019
 - *New strategies for axion-like particles*,
Talk at the Aspen center for physics summer program “The Energy Frontier Beyond LHC Run 2”, Aspen, August 15, 2019
 - *Flavorful Higgs bosons*,
Talk at ATLAS-UCSC theory BSM Higgs-Yukawa meeting, July 26, 2019
 - *CP violation in Higgs and in gauge boson couplings*,
Talk at open symposium-update of the European strategy for particle physics, Granada, May 14, 2019
 - *Neutrino tridents in the Standard Model and beyond*,
Talk at the 7th LCTP Spring Symposium: Neutrino Physics, University of Michigan, April 2, 2019
- 2018**
- *Dark matter models at the SeaQuest experiment*,
Talk at Light Dark World International Forum 2018, KAIST, December 18, 2018
 - *Visible and invisible signals from inelastic Dark Matter*,
Talk at the Heavy Photon Search (HPS) collaboration meeting, SLAC, November 7, 2018
 - *Searching for dark particles at the SeaQuest experiment*,
Talk at Bay area particle theory seminar (BAPTS), San Francisco State University, October 12, 2018
 - *Physics at high energy report*,
Summary talk at the 13th conference on the intersections of particle and nuclear physics (CIPANP 2018), Palm Springs, June 3, 2018
 - *Hidden sectors and dark photons*,
Talk at the 13th conference on the intersections of particle and nuclear physics, (CIPANP 2018), Palm Springs, May 30, 2018
 - *Dark Sectors at the Fermilab SeaQuest Experiment*,
Talk at the 3rd workshop of the LHC LLP Community, CERN, May 17, 2018

- *Hidden Sectors: from Cosmos to Accelerators*,
Closing plenary talk at 9th International Particle Accelerator Conference (IPAC'18), Vancouver, May 4, 2018
 - *Dark Sectors at the Fermilab SeaQuest Experiment*,
Talk at the “New Probes for Physics Beyond the Standard Model” conference, KITP, April 9, 2018
 - *WG2 Higgs & EWSB status report*,
Talk at the “Workshop on the physics of HL-LHC, and perspectives at HE-LHC” workshop, Fermilab, April 4, 2018
 - *CP violation in quark flavor physics*,
Talk at the “Testing CP-violation for baryogenesis” workshop, University of Massachusetts, Amherst, March 29, 2018
 - *The flavor of new Higgs Bosons*,
Talk at the “TRIUMF theory workshop on New Physics and the Higgs”, TRIUMF, February 20, 2018
 - *(Flavor) gaps in heavy Higgs searches*,
Talk at the “Triggering on New Physics at the HL-LHC” workshop, Princeton University, January 15, 2018
- 2017**
- *Dark sectors and neutrino experiments*,
Talk at the “NuPhys2017, prospects in neutrino physics” conference, Barbican center of London, December 22, 2017
 - *Dark sectors at fixed target experiments*,
Talk at “The future of searches for invisible particles” workshop, RWTH Aachen, December 14, 2017
 - *Dark sectors at fixed target experiments*,
Talk at the “BSM in direct, indirect and tabletop experiments” workshop, Weizmann institute of science, November 7, 2017
 - *Working group 2 Higgs report*,
Talk at the Workshop on the physics of HL-LHC, and perspectives at HE-LHC, CERN, November 1, 2017
 - *New signals from the Higgs boson(s)*,
Talk at the 13th assembly meeting of the LHC Higgs cross section working group, CERN, July 13, 2017
 - *Flavor physics theory*,
Plenary talk at the EPS conference on High energy physics, Venice, July 11, 2017
 - *Higgs physics*,
Summary talk at the Les Houches workshop series “Physics at TeV colliders”, Les Houches, June 23, 2017
 - *Constraining BSM at the HL-LHC*,
Talk at the LHCp conference, Shanghai, May 18, 2017
 - *Flavor perspective on heavy Higgs searches*,
Workshop “New Physics interpretations at the LHC 2”, Argonne, April 7, 2017
 - *The SeaQuest experiment & displaced dark sectors*,
Aspen winter conference “From the LHC to dark matter and beyond”, March 21, 2017
 - *Theory review of LHC physics*,
APS April Meeting, Washington DC, January 30, 2017

- 2016**
- *Pseudoscalar Portal Dark Matter*,
LHC Dark Matter Working Group Meeting, December 15, 2016
 - *DUNE Sensitivities to Neutrino Tridents Status report*,
DUNE Beyond the Standard Model Group Meeting, November 22, 2016
 - *Theory overview of Higgs exotic decays*,
Plenary talk given at the Higgs coupling conference 2016, SLAC, November 11, 2016
 - *Theory overview of Charged Higgs bosons*,
CMS workshop on charged Higgs bosons, MIT, November 3, 2016
 - *Exotic Decays: report and plans*,
The 12th Workshop of the LHCHXSWG, CERN, October 13, 2016
 - *Signatures of Flavorful Higgs Bosons*,
Beyond the Standard Model Workshop, MCTP, University of Michigan, October 11, 2016
 - *Challenging Dark Matter scenarios at the LHC*,
PIKIO meeting, Ohio State University, September 24, 2016
 - *Exotic Higgs(es) at the LHC*,
Talk given at the Bethe Forum 2016, Model building in the 13 TeV era,
Bonn, Germany, May 30, 2016
 - *Searches for an extended Higgs sector at the LHC*,
Talk given at the Higgs tasting workshop 2016, Benasque, Spain, May 20, 2016
 - *Proton beam dump experiments & inelastic dark matter*,
Talk given at the Dark sectors workshop 2016, SLAC, April 28, 2016
 - *Constraints on SUSY from low energy experiments*,
Talk given at the KITP program “Experimental Challenges for the LHC Run II”,
Santa Barbara, April 25, 2016
 - *Exotic Higgs signals*,
Talk given at the KITP program “Experimental Challenges for the LHC Run II”,
Santa Barbara, April 20, 2016
 - *SeaQuest & proton beam dump experiments*,
Talk given at the NEXT meeting, SLAC, January 29, 2016
- 2015**
- *Precision Higgs studies at the linear collider*,
Plenary talk given at the LCWS Linear collider workshop, Whistler, November 2, 2015
 - *What has the Higgs taught us?*,
Plenary talk given at LHCP 2015 conference, S.Petersburg, September 1, 2015
 - *Exploration of BSM Physics at the ILC*,
Talk given at DPF 2015, Ann Arbor, August 4, 2015
 - *Status and prospects for Higgs exotic decays*,
Talk given at the 10th Workshop of the LHCHXSWG, CERN, July 16, 2015
 - *Looking for dark forces at low and high energy experiments*,
Talk given at the MIAPP workshop:
“Anticipating 14 TeV insights into Matter from the LHC and Beyond”, Munich, July 8, 2015
 - *Mini-Review: Physics with Electroweakinos*,
Talk given at Pheno 2015, Pittsburgh, May 5, 2015
 - *Higgs exotic decays at high energy colliders*,
Talk given at the Aspen 2015 Winter conference:
“Exploring the Physics Frontier with Circular Colliders”, Aspen, January 29, 2015

- 2014**
- *Dark forces and Higgs exotic decays*,
Talk given at the BSM Higgs workshop @ LPC, Fermilab, November 5, 2014
 - *Exotic Higgs*,
Talk given for the BSM Higgs cross section working group kick-off meeting, October 7, 2014
 - *Higgs exotic decays*,
Talk given at the 2nd CFHEP symposium on circular collider physics, Beijing, August 11, 2014
 - *Higgs theory review*,
Talk given at 2014 Canadian Association of Physicists (CAP) congress, Sudbury, June 17, 2014
 - *Review on Higgs exotic decays*,
Talk given at LHCP conference, New York City, June 2, 2014
 - *Role of precision physics in constraining a BSM Higgs sector*,
Talk given at “After the discovery: hunting for a non-Standard Higgs sector” workshop, Benasque, April 10, 2014
- 2013**
- *Electroweakinos at the LHC*,
Talk given at TRIUMF theory workshop on Cosmology at colliders, December 9, 2013
 - *Cornering electroweakinos at the LHC*,
Talk given at “Susy at the near energy frontier” workshop, Fermilab, November 11, 2013
 - *Susy Higgs bosons*,
Talk given at “Higgs couplings 2013” workshop, Freiburg, October 16, 2013
 - *Loop induced Higgs couplings as a portal to New Physics*,
Talk given at “LHC-the first part of the journey” conference, KITP, S.Barbara, July 8, 2013
 - *Constraint on new particle masses and couplings from Higgs measurements*,
Talk given at “Snowmass energy frontier” workshop, Seattle, June 30, 2013
 - *Light staus, vacuum stability and the Higgs di-photon rate*,
Talk given at “The first three years of the LHC” workshop, MITP, Mainz, March 19, 2013
- 2012**
- *The Higgs to di-photon rate as a probe of supersymmetry*,
Talk given at “Understanding the TeV Scale Through LHC Data, Dark Matter, and Other Experiments” workshop, GGI, Florence, November 6, 2012
 - *Kaon rare decays in the warped extra dimensional model*,
Talk given at “Project X” workshop, Kaon working group, Fermilab, June 19, 2012
- 2011**
- *Signals of CP Violation Beyond the MSSM in Higgs Physics*,
Talk given at “Brookhaven Forum 2011”, October 20, 2011
- 2010**
- *Higgs mediated flavor changing neutral currents*,
Talk given at “Euroflavor ’10”, Munich, September 8, 2010
- 2009**
- *Probing Randall-Sundrum Model through FCNC*,
Talk given at “Ringberg Workshop on New Physics, Flavors and Jets”, Ringberg Castle, April 28, 2009

- *Patterns of Flavor Violation in a Warped Extra Dimensional Model with Custodial Protection*,
Talk given at “HEPTOOLS Meeting”, Lisbon, March 12, 2009

Teaching & Mentoring Experience

- Supervised the following PhD and undergraduate students:
 - George Demetriou (PhD student, September 2025 - now);
 - Karolina Maria Filipowicz (PhD student, October 2024 - now);
 - Pierce Giffin (PhD student, October 2020 - now);
 - Pankaj Munbodh (PhD student, September 2020 - now);
 - Nick Hamer (PhD student, June 2019 - July 2024);
 - Douglas Tuckler (PhD student, March 2016 - August 2020). Now postdoc at TRIUMF, Canada;
 - * Anna Iliaieva (undergraduate student, February 2024 - June 2025);
 - * Khai Luong (undergraduate student, January 2023 - June 2025);
 - * Ollie Jackson (undergraduate student, January 2023 - June 2025). Now PhD student at UC San Diego;
 - * Simon Seo (undergraduate student, January 2023 - June 2024). Now master’s student at SJSU;
 - * Emily Miller (undergraduate student, October 2021 - June 2022). Now PhD student at the University of Washington;
 - * Genessa Benton (undergraduate student, September 2020 - June 2021). Now master student at San Francisco State University;
 - * Ryan Jalalizadeh (undergraduate student, January - March 2021);
 - * Violet Piper (undergraduate student, January 2019 - June 2020).
- Co-supervised the following PhD and master students:
 - Evan Frangipane (PhD student, May 2019 - August 2024);
 - Ben Lehmann (PhD student, May 2020 - August 2022). Now postdoc at MIT;
 - Shijun Sun (PhD student, July 2019 - July 2020); Now postdoc at Georgia Institute of Technology;
 - Roberto Vega Morales (PhD student, 2012). Now assistant professor at the University of Granada;
 - Tien-Tien Yu (PhD student, 2012). Now associate professor at the University of Oregon;
 - Jianhong Zuo (undergraduate student, December 2020 - now);
 - ** Jose M. Cano (PhD exchange student at Autonomous University of Madrid, March - May, 2022);
 - * Adam Duran (undergraduate student, February 2020 - July 2021). Now master student at San Francisco State University;
 - * Monica Leys (undergraduate student, February 2020 - July 2021). Now PhD student at the University of Pittsburgh;
 - * Carli Smith (undergraduate student, February 2020 - July 2021). Now PhD student at Penn State University;
 - * Chris Ontko (undergraduate student, August 2016 - April 2017);
 - * Emmanuel Stamou (master student, 2010). Now junior professor at Dortmund University.

- Co-supervised the following PostDocs:
 - Pouya Asadi (Fall 2025 - now);
 - Reuven Balkin (Fall 2023 - now);
 - Jeff Dror (Fall 2020 - Summer 2023); Now Assistant Professor at the University of Florida;
 - Hiren Patel (Fall 2018 - Summer 2021). Now Scientific Computing Engineer at Emerald Cloud Lab;
 - Jared Evans (Fall 2017 - Summer 2020). Now data scientist at the Bosch Center for artificial intelligence;
 - Akshay Ghalsasi (Fall 2017 - summer 2020). Now postdoc at Harvard University;
 - Dean Robinson (Fall 2016 - summer 2019). Now LBL scientist;
 - Bibhushan Shakya (Fall 2016 - summer 2019). Now Staff Scientist at DESY.

- Teaching:
 - Mathematical methods, Phys-116A, Fall quarter 2025;
 - Particle Physics II, Phys-221B, Winter quarter 2025; Winter quarter 2026;
 - Introduction to Non-Relativistic Quantum Mechanics, Phys-215, Winter quarter 2024;
 - Quantum Field Theory 3, Phys-222, Spring quarter 2024;
 - Modern Physics, Phys-102, Fall quarter 2022, Fall quarter 2023;
 - Quantum Field Theory 2, Phys-218, Winter quarter 2021, Winter quarter 2022, Winter quarter 2023;
 - Introduction to physics IV, Phys-5D, Fall quarter 2020;
 - Mathematical methods, Phys-116C, Spring quarter 2020;
 - Particle astrophysics, Phys-129, Winter quarter 2019, Winter quarter 2020;
 - Quantum Field Theory 1, Phys-217, Fall quarter 2018, Fall quarter 2019, Fall quarter 2021, Fall quarter 2024;
 - “Particle Physics I” Course, PHYS8015, Spring Semester 2016, Spring Semester 2017, and Fall Semester 2017, McMicken college of Arts and Sciences, Physics Department, University of Cincinnati.

- Invited lecturer:
 - Lecture on “Higgs exotic decays” at the 53rd SLAC Summer Institute, July 28 - August 8, 2025;
 - Course of three lectures (90 minutes per lecture) on “Beyond the Standard Model Physics”, the 2025 Tri-Institute Summer School on Elementary Particle (TRISEP), TRIUMF, June 16 - 27, 2025;
 - Course of two lectures (60 minutes per lecture) on “Theory introduction to the dark sector” at the 2024 Belle II Physics Week, KEK, Tsukuba, Japan, October 14 - 18, 2024;
 - Course of two lectures (90 minutes per lecture) on “Probes of Dark Matter” at the N3AS Summer School on Multi-Messenger Astrophysics, UC Santa Cruz, July 13 - 22, 2024;
 - (Remote) lecture on “Dark sector physics” at the 2021 Belle II physics week, November 29 - December 3, 2021;
 - (Remote) course of two lectures (60 minutes per lecture) on “Standard Model Higgs basics” at the 49th SLAC Summer Institute, August 16 - 27, 2021;

- (Remote) course of five lectures (90 minutes per lecture) on the “Standard Model” at the ICTP summer school on particle physics, the Abdus Salam International Centre for Theoretical Physics, Trieste, May 31 - June 11, 2021;
 - (Remote) course of two lectures (60 minutes per lecture) on “BSM Physics” at the 15th annual Fermilab-CERN Hadron Collider Physics Summer School, August 10 - 21, 2020;
 - Course of two lectures (90 minutes per lecture) on “Dark sectors” at the First Belle-II Physics week, KEK, Japan, October 22 - 26, 2018;
 - One lecture on “Dark sectors at Belle II” at the 4th US Belle II Summer School, Cincinnati, July 24 - 28, 2018;
 - Course of five lectures (75 minutes per lecture) on “Flavor physics” at TASI 2018 - Theory in an Era of Data, University of Colorado, Boulder, June 4 - 29, 2018;
 - Course of four lectures (90 minutes per lecture) on “BSM phenomenology” at the MITP Summer School 2017 - Joint Challenges for Cosmology and Colliders, University of Mainz, August 6 - 25, 2017;
 - One special lecture on “Exotic Higgs Decays” at the Fermilab-CERN Hadron Collider Physics Summer School, Fermilab, August 11 - 20, 2016;
 - Course of three lectures (90 minutes per lecture) on the “Standard Model” at the 2016 Tri-Institute Summer School on Elementary Particles (TRISEP), TRIUMF, June 20 - July 1, 2016;
 - Course of three lectures (75 minutes per lecture) on “Flavour Physics and CP violation” at the 2015 CERN-JINR European School of High Energy Physics, Bansko, September 2-15, 2015;
 - One special lecture on “Phenomenology of the Higgs Boson” at the Beijing Center for future colliders, CFHEP, Beijing, August 7, 2014.
- Developed and co-taught the “Standard Model” course for the Perimeter Scholars International (PSI) master students at Perimeter Institute, Winter 2015.

Professional Activities

- **Member of:**
 - Particle Data Group (PDG) advisory committee, November 2024 - now;
 - Aspen Center for Physics, August 2023 - now;
 - Fermilab Physics Advisory Committee (PAC), January 2024 - now;
 - B-factory Programme Advisory Committee (BPAC), KEK, Japan, April 1, 2018 - now;
 - Steering committee of the LHC Higgs working group, October 2021 - February 2024;
 - Member and co-chair of the Fermilab Accelerator complex evolution (ACE) Science workshop, May 2023 - now;
 - *Exotic Higgs decay working group* <http://exotichiggs.physics.sunysb.edu>;
 - *LHC dark matter working group* <https://lpsc.web.cern.ch/content/lhc-dm-wg>;
 - American Physical Society (APS), Department of Fields and Particles (DPF) unit.
- **Convener:**
 - Higgs parallel session at the “32nd International Symposium on Lepton Photon Interactions at High Energies”, August 25 - 29, 2025;
 - Dark Matter and Astroparticle Physics session of the “International Conference on Supersymmetry and Unification of Fundamental Interactions”, August 23-28, 2021;

- “Global Interpretations” session of the “2021 International (online) Workshop on Future Linear Colliders”, March 18-21, 2021;
- ILC dark sector studies, Snowmass 2021, December 2020 - March 2022;
- Beyond the Standard Model Higgs session of the “Higgs 2020” (online) conference, October 26-30, 2020;
- Flavor session of “The 2020 International Workshop on the High Energy Circular Electron Positron Collider”, Shanghai, October 26-28, 2020;
- **Rare Frontier 06 working group**, “Dark Sector Studies at High Intensities”, Snowmass 2020, April 2020 - July 2022;
- Track 1 (physics at e^+e^- colliders, models of new physics and tests of the Standard Model through global fits) of “the International Workshop on Future Linear Colliders”, Sendai, October 28 - November 1, 2019;
- “Beyond the Standard Model Physics” session at the APS DPF 2019 meeting, Boston, July 29-August 2, 2019;
- “BSM aspects of Flavour Physics” session at the SUSY 2018 conference, Barcelona, July 23-27, 2018 and at the SUSY 2019 conference, Corpus Christi, May 20-24, 2019;
- “Physics at High Energies” session at the 13th Conference on the Intersections of Particle and Nuclear Physics (CIPANP 2018), Palm Springs, May 29-June 3, 2018;
- Beyond the Standard Model session of the “2018 Asian Linear Collider Workshop”, Fukuoka, May 28 - June 1, 2018;
- **Working group 2** (Higgs and electroweak symmetry breaking) of the “Workshop on physics of the high luminosity LHC, and perspectives at a high energy LHC” (October 2017 - February 2019).
- Beyond the Standard Model session of the “2017 and 2018 International Workshop on Future Linear Colliders”, Strasbourg, October 23 - 27, 2017; University of Texas Arlington, October 22-26, 2018;
- Beyond the Standard Model session of the Les Houches Workshop Series “Physics at TeV Colliders” 2017, June 5 - 23, 2017;
- Higgs session of the LHCP 2017 conference, Shanghai, May 15 - 20, 2017;
- Higgs session of the 38th International Conference of High Energy Physics (ICHEP), Chicago, August 3 - 10, 2016;
- Higgs session of the Chicago 2012 Workshop “LHC physics in the Higgs era”, Chicago, November 12 - 14, 2012;
- **Working group 3**, WG3, (Beyond the Standard Model Higgs) of the LHC Higgs cross section working group (Spring 2017 - Spring 2019);
- **Higgs Exotic Decays subgroup** of the WG3 group LHC Higgs cross section working group (Fall 2014 - Spring 2017).

- **Experimental Collaborations:**

- DarkQuest collaboration (that was initiated by S. Gori and N. Tran at Fermilab). March 2020 - now. ~ 50 collaborators.

- **Organizer:**

- “SUSY 2025” Conference, University of California, Santa Cruz, August 18 - 23, 2025;
- “SEARCH 2025” Conference, CERN, October 20 - 25, 2025;
- “FCC week” Conference, San Francisco, June 10 - 14, 2024;

- “Beyond the SM from Colliders to the Early Universe” symposium, University of Chicago - Fermilab, May 27 - 30, 2023;
- “Prospecting for New Physics through Flavor, Dark Matter, and Machine Learning”, Aspen winter conference, March 26 - 31, 2023;
- “Anomalies” workshop, Simons Center for Geometry and Physics, Stony Brook University, March 8 - 10, 2023;
- “Searching for New Physics from the Nuclear to the LHC Scale and Beyond”, Aspen summer program August 28 - September 17, 2022;
- “Ten Years After the Higgs Discovery: Particle Physics Now and Future”, TASI summer School, University of Colorado Boulder, June 6 - July 1, 2022;
- “Offshell-2021 – The virtual HEP conference on Run4@LHC”, July 6 - 9, 2021;
- “New Physics from Precision at High Energies” program at KITP, UC Santa Barbara, March 8 - May 21, 2021;
- “GGI Lectures on the Theory of Fundamental Interactions 2020”, winter school, GGI institute, Florence, January 7 - 24, 2020;
- “High energy/High luminosity LHC” meeting, Fermilab, April 4 - 6, 2018;
- “Testing CP-Violation for Baryogenesis” workshop, Amherst Center for Fundamental Interactions, March 29 - 31, 2018;
- “Exotic Higgs Decays” meeting, SLAC, November 7 - 8, 2016;
- “The LHC Awakens: A New Energy Frontier” summer Aspen workshop, Aspen, August 14 - September 18, 2016;
- 1st “PIKIO (Particle physics in Indiana, Kentucky, Illinois and Ohio)” meeting, Cincinnati, February 26, 2016;
- “LHC Searches for Long-Lived BSM Particles: Theory Meets Experiment” workshop, UMass Amherst, November 12 - 14, 2015;
- “Higgs exotic decays @ Fermilab” meeting, Fermilab, May 21 - 22, 2015;
- “The CP nature of the Higgs boson” workshop, Amherst Center for Fundamental Interactions, May 1 - 3, 2015;
- Journal Club at Perimeter Institute for Theoretical Physics, 2014-2015;
- Theory Seminars at the physics department of the University of Chicago, 2011-2012.

- **External Service:**

- Member of the DOE HEP Theory National Laboratories Panel;
- Member of the DOE HEP Early Career Super Panel;
- Member of the review panel for the DOE Office of High Energy Physics Comparative Review of the University theory program;
- Member of the HEP Theory & Cosmology Panel at the National Science Foundation;
- Reviewer for Research Corporation for Science Advancement;
- Reviewer for the DOE Office of Science Graduate Student Research (SCGSR) Program (2017, 2018);
- Funding Agency Review: Natural Sciences and Engineering Research Council of Canada; Swiss National Science Foundation; National Science Foundation; European Research Council; FONDECYT (Chilean Research Council).

- **Scientific advising:**

- Reviewer of the Higgs PDG review, 2023, 2025;
- Scientific advisor for the CERN’s experimental fixed target programme, 2023;
- Member of the Scientific Program Committee: “Windows on the Universe” conference, 30th Anniversary of the Rencontres du Vietnam, Quy Nhon, Vietnam, August 6 - 12, 2023;
- Core member of the “Feebly Interacting Particles Physics Centre”, CERN, March 2021 - now;
- APS J.J. & Noriko Sakurai theory dissertation award committee, 2021, 2022 (chair);
- Member of the Americas Linear Collider Committee, January 2021 - August 2024;
- Committee for the Fermilab next accelerator upgrade, February 2020 - May 2021;
- Program Committee: “LHCp 2020” conference, Paris, May 25-30, 2020;
- International Advisory Committee: “Beyond the Standard Model physics” conference at the International Centre for Interdisciplinary Science and Education (ICISE), Quy Nhon, Vietnam, September 15-21, 2019;
- Scientific Advisory Committee: “ALPS2019 – an Alpine LHC Physics Summit”, Innsbruck, April 22 - 27, 2019;
- Member of the poster award committee, LHCp 2017 conference, Shanghai, May 15 - 20, 2017 & LHCp 2021 (online) conference, June 7-12, 2021;
- Member of the poster award committee, Heraeus seminar, October 2016.

- **Internal Service:**

- Physics department Development and Fundraising committee, Fall 2024 - now;
- UCSC senate Committee on Development and Fundraising, Fall 2024 - now;
- Faculty search committee for an assistant professor, UCSC Mathematics Department (2023 - 2024);
- Member of the UCSC “Outstanding Postdoctoral Scholar Award” committee, 2023;
- Member of the Major Declaration Advising Committee, UCSC Physics Department (2021 - 2024);
- Faculty search committee for an assistant professor in theoretical particle physics and cosmology, UCSC Physics Department (2021-2022);
- Faculty search committee for an assistant professor, UCSC Astronomy Department (2019 - 2020);
- Member of the graduate committee, physics department UC Santa Cruz, 2019 - 2023;
- Member of the colloquium committee, physics department UC Santa Cruz, 2019 - 2022;
- PhD admission committee, physics department UC Santa Cruz, 2019, 2023 - now;
- Panelist at the discussion on the NSF CAREER program for Junior faculties at the University of Cincinnati, May 2, 2017;
- Junior faculty search committee for an assistant professor in experimental neutrino physics (2016 - 2017);
- PhD thesis committee of
 - * Chris Ewasiuk, (May 2025 - now, advisor: Stefano Profumo);
 - * Sam Roberts, (December 2024 - now, advisor: Jason Nielsen);
 - * Kevin Toner, “Flavor constraints in a generational 3HDM and new physics in $\Lambda_b \rightarrow \Lambda \nu \nu$ decays” (October 2024 - May 2025, advisor: Wolfgang Altmannshofer);
 - * Hava Schwartz, “Higgs at the ATLAS experiment” (December 2022 - March 2025, advisor: Jason Nielsen);

- * Aditya Gadani, “B-physics anomalies and Higgs” (June 2022 - May 2025, advisor: Wolfgang Altmannshofer);
 - * David Rubinstein, “Tensor Triangular Geometry”, mathematics department (January 2022 - now, advisor: Beren Sanders);
 - * Nolan Smyth, “The ABCs of PBHs: Atomic Dark Matter, Baryogenesis, and Charged Relics” (June 2021 - July 2024, advisor: Stefano Profumo);
 - * Joseph Connell, “Phenomenological consequences of the Aligned Two-Higgs Doublet Model” (March 2021 - May 2024, advisor: Howie Haber);
 - * Alic Spellman, “The Heavy Photon Search” (November 2020 - September 2024, advisor: Robert Johnson);
 - * Eric Shahly, “Studies in the renormalization of the two-Higgs-doublet-model” (September 2020 - September 2025, advisor: Howie Haber);
 - * Daniel Davies, “Quantum Lumps and Their Classical Descendants” (August 2019 - June 2022, advisor: Michael Dine);
 - * Brian Maddock, “Flavorful Higgs bosons” (October 2018 - March 2020, advisor: Wolfgang Altmannshofer);
 - * Sadaf S. Pournia, “Semiconductor nanowires” (May 2017 - August 2018, advisor: Hans-Peter Wagner);
 - * Amin Dashti, “Distributions of Historic Market Data” (February 2018 - August 2018, advisor: Slava Serota);
 - * Michele Tammaro, “Effective field theory for Dark Matter” (February 2018 - April 2020, advisor: Jure Zupan).
- Cincinnati Physics Colloquium committee (Sept. 2016 - August 2017);
 - Member of the Diversity committee at the physics department of the University of Cincinnati (2016 - 2018).

- **Outreach:**

- Interview for “Physicists on Zoom Without Coffee” by D. Garisto: “Peering beyond the Standard Model” <https://physicists-on-zoom-without-coffee.ghost.io/stefania-gori/>, October 2022;
- Article for the SCIPP newsletters: “Towards a Deeper Exploration of the Higgs boson”, June 2022;
- Article for the Physics Newsletter, University of California Santa Cruz Physics Department: “UCSC and the Higgs boson”, summer 2022;
- Presentation at the Watsonville high school “Studying physics in college”, April 14, 2021;
- (Remote) quarknet master class organized by SCIPP at UCSC, March 6, 2021;
- Interview for the article “Higgs Boson Gives Next-Generation Particle Its Heft”, Dan Garisto, Scientific American, August 6, 2020;
- Calbridge external mentor (Sidney Johnson, San Jose State University, August 2020 - June 2022);
- Interview for the article “Fine-tuning versus naturalness”, Madeleine O’Keefe, Symmetry magazine, January 28, 2020;
- Article in the EP Newsletter of the EP department at CERN, “Accelerating for dark discoveries”, March 19, 2019;
- Talk at the Society of Physics Students (SPS) meeting UCSC, “Fun with theories”, November 2, 2018;

- Public lecture at the Aspen Center for Physics, Heinz R. Pagels Physics Talk, “The secret life of the Higgs boson”, August 17, 2017;
- UC Particle physics LHCb Masterclass, QuarkNet, at the University of Cincinnati: program for local high school students, January 21, 2017;
- Visits and talk “Particle physics: a journey to the foundations of nature” at the All-girl McAuley High School, Cincinnati (May 11, 2016; February 24, 2017; March 13, 2018);
- “Saturday Physics Experiences” at the University of Cincinnati: program for local high school students, April 9, 2016;
- Panelist at the closing Panel “Physics and the Future” together with Immanuel Bloch, Sara Seager and Patrick Brady, Convergence conference, Perimeter Institute, June 24, 2015;
- Panelist at the discussion of the award-winning documentary “Particle Fever” about the hunt for the Higgs boson, Laurier University, Waterloo, March 8, 2015;
- Participation to “mentoring nights” with women interested in pursuing career in physics, University of Waterloo, Winter 2014.

- **Referee for**

- *Indian Journal of Physics*, 2021 - present;
- *International Journal of Modern Physics A*, 2019 - present;
- *Chinese Physics C*, 2018 - present;
- *SciPost Physics*, 2018 - present;
- *Physical Review Letters*, 2017 - present;
- *Nuclear Physics B*, 2013 - present;
- *Physics Letters B*, 2012 - present;
- *European Physics Journal C*, 2012 - present;
- *Journal of High Energy Physics*, 2011 - present.

- **Guest Editor for**

- *Letters in High Energy Physics (LHEP)*, special issue of the Higgs 10th anniversary.