

CURRICULUM VITAE

MARIANGELA LISANTI

Academic Appointments

CENTER FOR COMPUTATIONAL ASTROPHYSICS, FLATIRON INSTITUTE Associate Research Scientist	2022–
PRINCETON UNIVERSITY Associate Professor	2019–
Assistant Professor	2013–2019
PRINCETON CENTER FOR THEORETICAL SCIENCE (PCTS) Simons Foundation Postdoctoral Fellow	2010–2013

Education

STANFORD UNIVERSITY, Ph.D. Thesis: “The Search for Dark Matter: From Colliders to Direct Detection Experiments” Advisor: Jay G. Wacker	2005–2010
HARVARD UNIVERSITY, B.A. <i>summa cum laude</i> Project: Casimir Force in Microelectromechanical Systems Advisor: Federico Capasso	2001–2005

Awards and Honors

2022	Simon’s Investigator, <i>Simons Foundation</i>
2019	President’s Award for Distinguished Teaching, <i>Princeton University</i>
2018	Scialog Fellow, <i>Research Corporation & Heising Simons Foundation</i>
2017	Cottrell Scholar Award, <i>Research Corporation</i>
2016	Sloan Research Fellowship, <i>Alfred P. Sloan Foundation</i>
2013	Postdoctoral Finalist, Blavatnik Award for Young Scientists, <i>NY Academy of Sciences</i>
2012	Block Award, <i>Aspen Center for Physics</i>
2010	Travel and Computing Award, <i>LHC Theory Initiative</i>
2009	Phi Beta Kappa Scholarship, <i>Stanford</i>
2008	Paul Kirkpatrick Teaching Award, <i>Stanford</i>
2008	US Representative, Lindau Nobel Laureates Meeting, <i>Council for Lindau Nobel Laureate Meetings</i>
2007	P.D. Soros Fellowship for New Americans, <i>Soros Foundation</i>
2005	Graduate Research Fellowship, <i>National Science Foundation</i>
2005	National Defense Science and Engineering Graduate Fellowship, <i>Department of Defense</i>
2005	Humanities and Sciences Fellowship, <i>Stanford</i>
2005	Phi Beta Kappa, <i>Harvard</i>
2004	Barry L. Goldwater Scholar, <i>Goldwater Foundation</i>
2002	TR100 Award (world’s top innovators under the age of 35), <i>MIT Technology Review</i>

- 2001 First Place, Intel Science Talent Search, *Society for Science & the Public*
 2001 First Place, Intel International Science & Engineering Fair, *Society for Science & the Public*
 2000 First Place, Siemens Westinghouse Science & Technology Competition, *Siemens Corporation*

Postdoctoral Fellows Supervised

- Ani Prabhu, PCTS Fellow 2022–
 Carlos Blanco, Einstein Fellow 2020–
 Malte Buschmann 2020–
 Hongwan Liu, NYU-Princeton Postdoc 2019–
 Oren Slone, PCTS Fellow & NYU-Princeton Postdoc 2017–
 Lina Necib 2017–2021
 (postdoctoral fellow at Caltech & Carnegie; supervised through many collaborations)
 Assistant Professor, MIT, 2021–
 Yonatan Kahn 2015–2018
 KICP Fellow, U. of Chicago, 2018–2019
 Assistant Professor, Univ. of Illinois Urbana-Champaign, 2019–
 David Pinner, PCTS Fellow 2014–2017
 Postdoctoral Fellow, Harvard/Brown, 2017–2019
 Timothy Cohen, LHC-TI Fellow 2014–2015
 Associate Professor, Univ. of Oregon, 2015–
 Daniele Alves 2013–2014
 Postdoctoral Fellow, NYU, 2014–2017
 Staff Scientist, Los Alamos National Laboratory, 2017–
 Samuel Lee, PCTS Fellow 2012–2015
 Computational Scientist, Broad Institute, 2015–

Graduate Students Supervised

- Zachary Gelles 2022–
 Cassidy Kollmann 2021–
 Dylan Folsom 2020–
 Sandip Roy 2020–
 Adriana Dropulic 2019–
Ph.D. Awards: NSF Graduate Research Fellow
 Matthew Moschella 2016–2022
Ph.D. Awards: Kusaka Memorial Prize in Physics
 Laura Chang 2015–2020
Ph.D. Awards: NSF Graduate Research Fellow, P.D. Soros Fellowship for New Americans

Siddharth Mishra-Sharma	2013–2018
<i>Ph.D. Awards:</i> Kusaka Memorial Prize in Physics, Physics Department Teaching Award	
IAIFI Fellow (MIT and Harvard) 2021– ; Postdoctoral Fellow (NYU) 2018–2021	
Hou Keong Lou	2010–2015
<i>Ph.D. Awards:</i> DOE Office of Science Graduate Fellowship	
Postdoctoral Fellow (UC Berkeley) 2015–2018	
Benjamin Safdi	2013–2014
(student of Igor Klebanov, co-supervised in his final two years)	
Assistant Professor (UC Berkeley) 2021– ; Member (LBNL) 2020–2021	
Assistant Professor (U. of Michigan) 2017–2020; Pappalardo Fellow (MIT) 2014–2017	

Undergraduate Students Supervised

jp = junior paper, st = senior thesis, ir = independent research

Noah Luch (jp, ir)	2022–
Ben Dodge (st, jp, ir)	2020–2022
Siddharth Dandavate (ir)	2020–2022
Connor Hainje (st, ir)	2020–
Neha Kumar (st, ir)	2020–
Rebecka Maehring (jp, st, ir)	2020–
Aidan Zentner (ir)	2020–2022
Cara Giovanetti (st, jp, ir), APS Apker Award Finalist	2018–2021
Iryna Glushchenko (st)	2019–2020
Sunny Qin (st)	2018–2019
Jean Somalwar (jp, ir)	2018–2020
Elliot Davies (jp)	2018
Grace Sommers (jp, ir), Goldwater Scholar	2018
Tess Jacobson (jp)	2017
Zachary Schoenfeld (ir)	2017
Jonah Herzog-Arbeitman (jp, ir), Marshall Scholarship	2016–2017
Elena de la Hoz Lopez-Collado (st)	2016–2017
Sarah Battat (jp)	2016
Daniel Gift (jp, ir)	2015
Thomas Hansen (jp)	2013

Research Grants

cg = collaborative grant

Schmidt Transformative Tech. Fund (cg), “BSM Discovery with AI Anomaly Detection”	2021–2023
U.S. Department of Energy (cg), “High Energy Physics Research”	2021–2024
Space Telescope Science Institute/NASA, Postdoctoral support for C. Blanco	2020–2023
Binational Science Foundation (cg), “Multifaceted Probes of the Dark Universe”	2019–2023
Schmidt DataX Fund, “Unveiling the History of the Milky Way Galaxy”	2019–2020
U.S. Department of Energy (cg), “High Energy Physics Research”	2018–2021
Cottrell Scholar Award	2017–2021

Alfred P. Sloan Foundation	2016–2018
U.S. Department of Energy (cg), “High Energy Physics Research”	2015–2018
The LHC Theory Initiative, Postdoctoral support for T. Cohen	2014–2015

Teaching Experience

COURSES TAUGHT

Physics 529: Introduction to High Energy Physics	Spring: 2015–2016
Physics 406: Modern Physics II–Nuclear & Elementary Particles	Fall: 2015–2016
Physics 235: Introduction to Research in Physics	Spring: 2018–2021
Physics 207: From Classical to Quantum Mechanics	Fall: 2022
Physics 105: Advanced Physics–Mechanics, Lecturer	Fall: 2019–2020
Physics 105: Advanced Physics–Mechanics, Preceptor	Fall: 2017–2018
Physics 103: General Physics I, Preceptor	Fall: 2013–2014

TEACHING DEVELOPMENT & OUTREACH

Speaker, “Peer Learning” faculty program at McGraw Center	Oct. 2019
Speaker, “Profiles in Innovative Teaching” series at McGraw Center	Oct. 2018
AAPT Fall New Faculty Workshop	Nov. 2014
Teagle Teaching Seminar at the McGraw Center	2013–2014

University Service

Council of the Princeton University Community, Member	2020–
Princeton Center for Theoretical Science, Faculty Fellow	2019–
Center for Statistics and Machine Learning, Participating Faculty	2019–

Departmental Service

Equity, Diversity and Inclusion Initiative, <i>Founding Chair</i>	2020–
Future Faculty in the Physical Sciences Postdoctoral Fellowship, <i>Founding Committee</i>	2020–
Faculty Search Committee, <i>Chair</i>	2020–2021
Rising Stars in Physics @ Princeton, <i>Co-Chair</i>	2019–2022
Undergraduate Women in Physics, <i>Advisor</i>	2018–2020
Society of Physics Students (SPS), <i>Advisor</i>	2015–2020
Notable SPS Chapter (2017), Outstanding SPS Chapter (2015, 2016)	
Graduate Women in Physics, <i>Advisor</i>	2013–2020
Climate and Inclusion Committee, <i>Member</i>	2019–2020
Undergraduate Program Committee, <i>Member</i>	2015–2020
Faculty Search Committee, <i>Member</i>	2013–2015, 2019–2020
Princeton Bridge Program in Physics, <i>GRE Prep and Mentoring</i>	2013–2016
Graduate Admissions Committee, <i>Member</i>	2012–2015

FPO Committees

S. Higginbotham (2022), X. Li (2021), S. Zhang (2020), K. Mei (2020), S. Bergman (2019), K. Pardo (2019), J. Luo (2019), S. Cooperstein (2019), J. Li (2019), M. Randeria (2019), Suerfu (2018), W. Coulton (2018), J. Hardenbrook (2017), S. Westerdale (2016), A. Basirnia (Rutgers, 2016), E. Shields (2015), I. Drozdov (2015), J. Brodsky (2015), H. Saka (2015), M. Mooney (2014), B. Zhou (2014), A. Zuranski (2014), E. Berry (2014)

Junior Paper (jp)/Senior Thesis (st) Second Reader

C. Chandrashekar (jp 2021), B. Dodge (jp 2021), V. Kapil (st 2021; jp 2020), I. Kaul (jp 2021), C. Minns (st 2020), J. Somalwar (st 2020), M. Broome (st 2019), S. Aggarwal (st 2019), N. Ozdowski (jp 2017), S. Gee (st 2017), S. Battat (st 2017), D. Gift (st 2017), A. R. Pop (st 2015), R. Fitzpatrick (jp 2015), R. Myers (jp 2014)

External Service

CONFERENCE & WORKSHOP ORGANIZATION

Cosmological and Astrophysical Probes of New Physics	Princeton, NJ, Apr. 2022
BSM PANDEMIC Seminar Series	virtual, 2020–2021
Dark Matter from the Laboratory to the Cosmos	Aspen, CO, Aug. 2021
Novel Ideas for Dark Matter	Princeton, NJ, Jan. 2019
New Probes for Physics Beyond the Standard Model	Santa Barbara, CA, Apr. 2018
Triggering on New Physics at the High-Luminosity LHC	Princeton, NJ, Jan. 2018
Reaching New Summits: The LHC at Full Strength	Aspen, CO, Aug. 2017
Workshop on non-WIMP Dark Matter	Princeton, NJ, Nov. 2016
COSMO 2016 (Parallel Session Co-organizer)	Ann Arbor, MI, Aug. 2016
The Dark Matter Paradigm: Current Status and Challenges	Princeton, NJ, Oct. 2013
TeV Particle Astrophysics (Parallel Session Co-organizer)	UC Irvine, CA, Aug. 2013
Higgs Physics After Discovery: Seminar Series and Conference	Princeton, NJ, 2012–2013
Exploring Hints for New Physics at Colliders	Princeton, NJ, Apr. 2012
Boost2011 Conference	Princeton, NJ, May 2011
Implications of Xenon100 Results	Princeton, NJ, Apr. 2011
Dark Matter: Direct Detection and Theory Developments	Princeton, NJ, Nov. 2010
Workshop on Topologies for Early LHC Searches	Stanford, CA, Sep. 2010

COMMITTEES

Pollica Physics Centre, Scientific Committee	2022–
Aspen Center for Physics, Member	2019–
CERN-TH Advisory Committee in Astroparticle Physics	2019–2021
SNOLAB Experiment Advisory Committee	2016–2019
DOE BRN Study on Dark Matter New Initiatives, Cross Cutting Panel	2018
APS Division of Particles & Fields Nominating Committee	2018

SCIENCE OUTREACH

Univ. of Oregon Women in Physics, <i>Seminar Speaker</i> [virtual]	Nov. 2020
World Science Festival “Physics in the Dark,” <i>Panelist</i>	May 2019
PSW Science, <i>Public Lecture</i>	Apr. 2019
Aspen Center for Physics, <i>Heinz Pagels Public Lecture</i>	Aug. 2018
Princeton Conference for Undergraduate Women in Physics, <i>Speaker</i>	Jan. 2017

MIT Rising Stars in Physics, <i>Panel Member</i>	Oct. 2016
Embassy of Italy, <i>Keynote Address</i>	May 2015
Aspen Center for Physics, <i>General Public Q&A</i>	Feb. 2011
Aspen Physics-Is-For-Kids BBQ, <i>Speaker</i>	Jun. 2010
Stanford Summer Internship Program for Minority Students, <i>Speaker</i>	Jul. 2009

REFEREEING

A&A, JCAP, JHEP, Phys. Dark Universe, Phys. Rev. D, Phys. Rev. Lett., Rev. Mod. Phys., Phys. Rep.

GRANT REVIEW

NSF, DOE, RCSA, LHC-TI, Soros Fellowship for New Americans, GIF Young Scientist Program

Spring/Summer School Lectures

PITP: “Astrophysics of Dark Matter”	Princeton, NJ, Jul. 2017
HCPSS: “Dark Matter”	Batavia, IL, Aug. 2016
ICTP Spring School: “Dark Matter Physics”	Trieste, Italy, Mar. 2016
TRISEP: “Astroparticle Physics—Theory”	Waterloo, Canada, Jul. 2015
TASI: “Particle Phenomenology for String Theorists”	Boulder, CO, Jun. 2015

Invited Scientific Talks

Summary: over 160 invited colloquia, conference talks, and seminars given