

# Mariel Pettee

Physicist, AI researcher, and artist  
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## Positions

UNIVERSITY OF WISCONSIN-MADISON	2025 - Now
<i>Assistant Professor of Physics, Bernice Durand Faculty Fellow</i>	
FLATIRON INSTITUTE & POLYMATHIC AI	2022 - Now
<i>Guest Researcher</i>	
LAWRENCE BERKELEY NATIONAL LABORATORY	2022 - 2025
<i>Chamberlain Postdoctoral Fellow</i>	

## Education

YALE UNIVERSITY, New Haven, CT	2021
<i>PhD in Physics</i>	
UNIVERSITY OF CAMBRIDGE, Trinity College, Cambridge, UK	2015
<i>MASt in Physics; Lt. Charles H. Fiske III Harvard-Cambridge Scholar</i>	
HARVARD UNIVERSITY, Cambridge, MA	2014
<i>AB in Physics &amp; Mathematics; Secondary in Dramatic Arts</i>	
<i>Cum Laude, High Honors in Field</i>	

## Selected Publications

[Full list](#) of papers on my Google scholar page. (**Note:** ▷ indicates alphabetical author ordering.)

- 2025 R. Hashmani, G. Merz, H. Qu, **M. Pettee**, K. Cranmer. [Multimodal Datasets with Controllable Mutual Information](#). [[arXiv:2510.21686](https://arxiv.org/abs/2510.21686)] [cs.LG].  
F. Canelli, K. Cormier, A. Cudd, D. Gillberg, R. G. Huang, W. Jin, S. Lee, V. Mikuni, L. Miller, B. Nachman, J. Pan, T. Pani, **M. Pettee**, Y. Song, F. Torales Acosta. [A Practical Guide to Unbinned Unfolding](#). [[arXiv:2507.09582](https://arxiv.org/abs/2507.09582)] [hep-ph].  
A. Das, N. Lourie, S. Golkar, **M. Pettee**. [What's In Your Field? Mapping Scientific Research with Knowledge Graphs and Large Language Models](#). [[arXiv:2503.09894](https://arxiv.org/abs/2503.09894)] [cs.CL].  
L. Zerkowski, Z. Wang, I. Vidrin, **M. Pettee**. [Invisible Strings: Revealing Latent Dancer-to-Dancer Interactions with Graph Neural Networks](#). [[arXiv:2503.04816](https://arxiv.org/abs/2503.04816)] [cs.CV].  
Z. Wang, L. Zerkowski, I. Vidrin, **M. Pettee**. [Dyads: Artist-Centric, AI-Generated Dance Duets](#). [[arXiv:2503.2503.03954](https://arxiv.org/abs/2503.2503.03954)] [cs.CV].
- 2024 ATLAS Collaboration (**Contact Editor**). [A Simultaneous Unbinned Differential Cross Section Measurement of 24 Z+jets Kinematic Observables with the ATLAS Detector](#). *Phys. Rev. L.* [CERN-EP-2024-132] [[arXiv:2405.20041](https://arxiv.org/abs/2405.20041)] [hep-ex].

- ATLAS Collaboration (**Contact Editor**). [Evidence of the VH, H \$\rightarrow\tau\tau\$  process with the ATLAS detector in Run 2](#). *Phys. Rev. B*. [CERN-EP-2023-272] [[arXiv:2312.02394](#)] [hep-ex].
- 2023 S. Golkar & **M. Pettee**, M. Eickenberg, A. Bietti, M. Cranmer, G. Krawezik, F. Lanusse, M. McCabe, R. Ohana, L. Parker, B. Régalo-Saint Blanchard, T. Tesileanu, K. Cho, S. Ho. [xVal: A Continuous Number Encoding for Large Language Models](#). Accepted contribution at NeurIPS AI for Science Workshop. Submitted. [[arXiv:2310.02989](#)] [stat.ML].
- M. Pettee**, S. Thanvantri, B. Nachman, D. Shih, M. R. Buckley, J. H. Collins. [Weakly-Supervised Anomaly Detection in the Milky Way](#). *MNRAS*. [[arXiv:2305.03761](#)] [astro-ph.GA].
- S. Rizvi, **M. Pettee**, B. Nachman. [Learning Likelihood Ratios with Neural Network Classifiers](#). *JHEP*. [[arXiv:2305.10500](#)] [hep-ph].
- V. Mikuni, **M. Pettee**, B. Nachman. [Fast Point Cloud Generation with Diffusion Models in High Energy Physics](#). *Phys. Rev. D*. [[arXiv:2304.01266](#)] [hep-ph].
- ▷ A. Huang, X. Ju, J. Lyons, D. Murnane, **M. Pettee**, L. Reed. [Heterogeneous Graph Neural Network for Identifying Hadronically Decayed Tau Leptons at the High Luminosity LHC](#). *JINST*. [[arXiv:2301.00501](#)] [physics.ins-det].
- 2022 ▷ A. Bogatskiy, S. Ganguly, T. Kipf, R. Kondor, D. W. Miller, D. Murnane, J. T. Offermann, **M. Pettee (co-editor)**, P. Shanahan, C. Shimmin, and S. Thais. [Symmetry Group Equivariant Architectures for Physics](#). *Snowmass 2021 White Paper*. [[arXiv:2203.06153](#)] [cs.LG].
- ATLAS Collaboration (**co-editor**). [Point Cloud Deep Learning Methods for Pion Reconstruction in the ATLAS Experiment](#). [ATL-PHYS-PUB-2022-040].
- M. Papillon, **M. Pettee**, N. Miolane. [PirouNet: Creating Dance through Artist-Centric Deep Learning](#). *EAI ArtsIT 2022 (Best Paper Award)*. [[arXiv:2207.12126](#)] [cs.LG].
- M. Papillon, **M. Pettee**, N. Miolane. [Intentional Choreography with Semi-Supervised Recurrent VAEs](#). *NeurIPS 2022 Workshop on ML for Creativity and Design*. [[arXiv:2209.10010](#)] [cs.LG].
- ▷ G. Kasieczka, R. Mastandrea, V. Mikuni, B. Nachman, **M. Pettee**, D. Shih. [Anomaly Detection Under Coordinate Transformations](#). [[arXiv:2209.06225](#)] [hep-ph].
- 2021 **M. Pettee**. [Interdisciplinary Machine Learning for Particle Physics](#). *PhD Thesis, Yale University*.
- 2020 **M. Pettee**, S. Miret, S. Majumdar, and M. Nassar. [Choreo-Graph: Learning Latent Graph Representations of the Dancing Body](#). *NeurIPS 2020 Workshop on ML for Creativity and Design*.
- 2019 **M. Pettee**, C. Shimmin, D. Duhaime, and I. Vidrin. [Beyond Imitation: Generative and Variational Choreography via Machine Learning](#). *Proceedings of the 10th International Conference on Computational Creativity*. [[arXiv:1907.05297](#)] [cs.LG].
- The ATLAS Collaboration (**co-editor**). [Expected Performance of the ATLAS Detector at the High-Luminosity LHC](#). [ATL-PHYS-PUB-2019-005].

## Invited Talks

### ON MULTIMODAL EMBEDDINGS FOR SCIENTIFIC DATA

2025 Yale University

Physics x Data Science Seminar

### INVISIBLE CITIES: TOWARD A MULTI-MODAL ERA OF FUNDAMENTAL PHYSICS RESEARCH

2025	Argonne National Laboratory FirstPrinciples Madison, WI Santa Clara University UW-Madison Georgia Tech	Physics Colloquium Research Seminar Lepton-Photon 2025 Physics Department Colloquium Physics Department Colloquium Physics Department Colloquium
2024	Carleton University Lawrence Berkeley National Lab CERN Argonne National Laboratory Smith College Bard College	Physics Department Colloquium Berkeley Lab AI for Science Summit Foundation Models for Science Mini-Workshop HEP Theory Seminar Physics Department Colloquium Physics Department Colloquium

#### A SIMULTANEOUS UNBINNED DIFFERENTIAL CROSS-SECTION MEASUREMENT OF 24 $Z + \text{jets}$ OBSERVABLES

2024	<i>Ljubljana, Slovenia</i>	ATLAS Standard Model Workshop
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#### TOWARDS FOUNDATION MODELS FOR FUNDAMENTAL PHYSICS

2024	NASA, <i>Huntsville, AL</i> DESY, <i>Hamburg, Germany</i> LBNL, <i>Berkeley, CA</i> U. of Tokyo, <i>Tokyo, Japan</i> KEK, <i>Tsukuba, Japan</i>	Science Mission Directorate AI Workshop 1st Large Language Models in Physics Symposium Physics Division Research Progress Meeting AI-Driven Discovery in Physics & Astrophysics ML for HEP Workshop
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#### WHAT DO LANGUAGE MODELS HAVE TO SAY ABOUT FUNDAMENTAL PHYSICS?

2024	MIT, <i>Cambridge, MA</i> UC Berkeley, <i>Berkeley, CA</i> SLAC, <i>Menlo Park, CA</i>	IAIFI Summer Workshop Bakar Inst. of Digital Materials for the Planet Seminar SLAC AI Seminar
2023	IBM, <i>Zurich, Switzerland</i>	IBM Research Seminar

#### DANCING WITH MYSELF: AI AND CHOREOGRAPHY

2025	Munich Conservatory, <i>Germany</i>	Artificial Intelligence in Culture and Arts Lecture
2024	School of the Art Inst. of Chicago Pratt Institute, <i>Brooklyn, NY</i> Foothill College, <i>Los Altos Hills, CA</i>	Research Seminar AI in the Humanities Symposium Creativity in the Age of AI Symposium
2023	Mills College, <i>Oakland, CA</i>	DanceHack Workshop
2022	U. of Alabama, <i>Tuscaloosa, AL</i> Amherst College, <i>Amherst, MA</i> Ballet Des Moines, <i>Des Moines, IA</i> Kinetic Arts, <i>San Francisco, CA</i>	Theatre & Dance Department Colloquium AI in the Liberal Arts Seminar Panel Discussion: Creativity, Science, and Ethics Y-Exchange Featured Artist
2020	Kinetic Arts, <i>San Francisco, CA</i> Brown U., <i>Providence, RI</i>	Kinetic Arts Open Lab Talk Conference for Research on Choreographic Interfaces

#### INTERDISCIPLINARY AI FOR FUNDAMENTAL PHYSICS

2023	Ascona, <i>Switzerland</i> Flatiron CCA, <i>New York, NY</i>	Hammers & Nails (Swiss Edition) KITP Workshop on Data-Driven Galaxy Evolution
2022	Univ. of Alabama, <i>Tuscaloosa, AL</i>	Physics Department Colloquium

	SLAC, Menlo Park, CA UC Irvine, Irvine, CA Imperial College, London, UK Amherst College, Amherst, MA Cornell U., Ithaca, NY	SLAC AI Seminar Physics & Astronomy Machine Learning Seminar Series Data Learning Working Group Seminar Artificial Intelligence in the Liberal Arts Seminar Series Laboratory for Elementary Particle Physics Journal Club
2021	UC Berkeley, Berkeley, CA Seattle U., Seattle, WA U. of Tennessee, Knoxville, TN Flatiron Institute, New York, NY	Berkeley Institute for Data Science ML + Science Forum Physics Department Colloquium HEP Seminar Center for Computational Astrophysics ML Forum

#### WEAKLY-SUPERVISED ANOMALY DETECTION IN THE MILKY WAY

2023	UChicago, Chicago, IL Rutgers U., New Brunswick, NJ	Data Science Institute & James Franck Institute Seminar High-Energy Physics Theory Seminar
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#### EQUIVARIANCE MEETS INVARIANCE: PHYSICS-INFORMED MACHINE LEARNING

2023	Minneapolis, MN	American Physical Society (APS) April Meeting
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### Contributed Talks

#### A HIGH-DIMENSIONAL, UNBINNED STANDARD MODEL MEASUREMENT WITH THE ATLAS EXPERIMENT

2025	Caltech, Pasadena, CA	ML4Jets
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#### A SIMULTANEOUS UNBINNED DIFFERENTIAL CROSS-SECTION MEASUREMENT OF 24 $Z$ +JETS OBSERVABLES

2024	Sorbonne Université, Paris, France	France-Berkeley PHYSTAT Conference on Unfolding
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#### USING CLASSIFIERS FOR UNBINNED UNFOLDING

2024	Sorbonne Université, Paris, France	France-Berkeley PHYSTAT Conference on Unfolding
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#### WEAKLY-SUPERVISED ANOMALY DETECTION IN THE MILKY WAY

2023	Flatiron Institute, New York, NY	Flatiron-Wide Machine Learning Meeting
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#### POINT CLOUD METHODS FOR PION RECONSTRUCTION IN THE ATLAS DETECTOR

2022	CERN, Geneva, Switzerland New York, NY	Inter-experiment Machine Learning Workshop APS April Meeting
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#### DANCING WITH MYSELF: AI AND CHOREOGRAPHY

2021	St. Louis, MO	Strange Loop Conference
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#### CHOREO-GRAF: LEARNING LATENT GRAPH REPRESENTATIONS OF THE DANCING BODY

2020	NeurIPS, Vancouver, Canada	Workshop on ML for Creativity and Design
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#### RUN 3 TRIGGERS FOR HLEPTONS ANALYSES

2020	Online	ATLAS Tau & HLeptons Workshop
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#### EXPECTED ATLAS PERFORMANCE AT THE HL-LHC

2019	UMass Amherst, Amherst, MA	US ATLAS Workshop
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## OVERVIEW OF TAU VS. JET IDENTIFICATION

2019 Prague, Czech Republic ATLAS Tau & HLeptons Workshop

BEYOND IMITATION: GENERATIVE CHOREOGRAPHY VIA MACHINE LEARNING

2019 UNC Charlotte, *Charlotte, NC* International Conference on Computational Creativity

RNN TAU IDENTIFICATION IN THE ATLAS HLT

2018	Fermilab, Batavia, IL CERN, Geneva, Switzerland	US LHC Users Association Meeting ATLAS Machine Learning Workshop
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THE 2018 ATLAS TAU TRIGGER & COMBINED PERFORMANCE

2018 U. of Pittsburgh, *Pittsburgh, PA* US ATLAS Workshop

ATLAS TAU TRIGGER & COMBINED PERFORMANCE AT HIGH  $\mu$

2018 CERN, Geneva, Switzerland ATLAS P&P Physics Plenary

FTK & THE TAU TRIGGER

2018 CERN, Geneva, Switzerland ATLAS TDAQ Week

## Awards

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|------|---|---|
| 2023 | DOE Mission Science Allocation Award  | NERSC                                       |
|      | <ul style="list-style-type: none"><li>Allocated over 120,000 GPU hours</li><li>Title: “Multidisciplinary AI Models for Science”</li></ul> |   |
| 2021 | Owen Chamberlain Postdoctoral Fellowship  | <i>Lawrence Berkeley National Lab</i>       |
| 2018 | Lightning Round Talk Winner   | <i>US LHC Users Association</i>             |
|      | Women’s Faculty Forum Seed Grant  | <i>Yale University</i>                      |
| 2016 | Winner, Windy City Physics Slam   | <i>ICHEP</i>                                |
|      | <ul style="list-style-type: none"><li><a href="#">PBS Chicago Interview Clip</a></li></ul>  |   |
|      | Distinguished Poster Award (Top 20 out of 500)  | <i>ICHEP</i>                                |
| 2015 | Leigh Page Prize  | <i>Yale University</i>                      |
|      | Honorable Mention   | <i>NSF Graduate Research Fellowship</i>     |
| 2014 | Harvard-Cambridge Scholarship   | <i>Harvard University</i>                   |
|      | <ul style="list-style-type: none"><li>Full tuition for a master’s program at Cambridge</li></ul>  |   |
|      | Julia Shaffner Memorial Prize   | <i>Harvard University</i>                   |
|      | <ul style="list-style-type: none"><li>Outstanding woman in science</li></ul>  |   |
| 2013 | President’s Challenge Finalist  | <i>The Harvard Innovation Lab</i>           |
|      | 15 Most Interesting Seniors   | <i>The Harvard Crimson</i>                  |
| 2012 | Judges’ Award for Acting  | <i>International Student Drama Festival</i> |
|      | Certificate of Distinction in Teaching  | <i>Harvard University</i>                   |
|      | Caroline Isenberg Fellowship  | <i>Harvard University</i>                   |
|      | Elizabeth Cary Agassiz Fellowship   | <i>Harvard University</i>                   |
| 2011 | Best Lead Actress in a Play   | <i>Harvard Theater Award</i>                |

Press

- 2024 Viewing the Standard Model with unprecedented detail through the lens of AI  
*Berkeley Lab Physical Sciences News*

2023 ATLAS measures rare Higgs boson interaction with tau leptons, *ATLAS Briefing*  
“Scientists Begin Building AI for Scientific Discovery Using Tech Behind ChatGPT”
  - [Simons Foundation Press Release](#)
  - [Berkeley Lab Article](#)

2022 Interviewee on the Cognicast podcast
  - A wide-ranging discussion of my research trajectory across AI, physics, and art
  - [Episode webpage](#)
  - [Listen on Apple Podcasts](#)

2021 Mariel Pettee successfully defends PhD thesis, *Yale Physics*

2020 Advice to Women in STEM: Mariel Pettee, *Yale Scientific Magazine*

2019 Feature on Yale University’s Instagram page  
Featured on Women+ Art AI

2016 Scientists Battle for Physics Slam Crown, *PBS Chicago*

2013 15 Most Interesting Seniors: Mariel N. Pettee, *The Harvard Crimson*

## Teaching Experience

## Graduate Courses

- 2025 PHYSICS 805: Research Methods for Machine Learning & Physics UW-Madison

## Graduate-level Courses on Scientific Teaching

- 2016 PHYSICS 530: Theory and Practice of Scientific Teaching for Physical Scientists      Yale  
2014 ASTRO 302: Scientists Teaching Science      Harvard

## Teaching Assistant Experience

**Note:** ▷ indicates courses for which I was the sole TA.

2016 - 2018	▷ PHYSICS 115: The Physics of Dance	<i>Yale University</i>
2018	▷ AMERICAN STUDIES 349: Technologies for Movement Research	<i>Yale University</i>
2017	PHYSICS 171: University Physics for the Life Sciences	<i>Yale University</i>
2016	PHYSICS 205L: Modern Physical Measurement	<i>Yale University</i>
2015	PHYSICS 165L: General Physics Laboratory	<i>Yale University</i>
2012 - 2013	▷ MATH 121: Linear Algebra and Applications	<i>Harvard University</i>
2013	MATH 110: Vector Space Methods for Differential Equations	<i>Harvard University</i>

## Guest Lectures

2023	THE LANGUAGE OF MOVEMENT	Amherst College, <i>Amherst, MA</i>
2021	GRADUATE-LEVEL MACHINE LEARNING FOR PHYSICS	U. of Alabama, <i>Tuscaloosa, AL</i>

## Mentorship

Fall 2024	Malika Golshan, post-grad in Physics at UC Berkeley <i>Weakly Supervised vs. Fully Supervised Learning</i>
Summer 2024	Abhipsha Das, grad student in Computer Science at NYU Courant Institute <i>Mapping the Landscape of Scientific Literature with LLMs</i> <b>Next position:</b> ML engineer at Phamily
Summer 2024	Luis Zerkowski, grad student in Artificial Intelligence at University of Amsterdam <i>Analyzing Choreographic Duets with Graph-Based Autoencoders</i> <b>Next position:</b> ML & Algorithms Scientist at argen
Summer 2024	Zixuan Wang, grad student in Computer Science at Georgia Institute of Technology <i>Generating Choreographic Duets with Transformers</i> <b>Next position:</b> software engineer at State Street
2022 - 2024	Shahzar Rizvi, undergrad & then graduate student in Statistics at UC Berkeley <i>Learning Likelihood Ratios with Neural Network Classifiers</i> ( <a href="#">published in JHEP</a> ) <b>Next position:</b> graduate student at MIT
2022 - 2024	Sowmya Thanvantri, undergrad in Physics at UC Berkeley <i>Weakly-Supervised Anomaly Detection in the Milky Way</i> ( <a href="#">published in MNRAS</a> ) <b>Next position:</b> graduate student at Princeton
2022	Jason Wong, undergrad in Physics at UC Berkeley <i>Optimization Studies for the ATLAS OmniFold Measurement</i> ( <a href="#">ATLAS preprint</a> ) <b>Next position:</b> graduate student at UC Berkeley

## Leadership & Service

2024 - 2025	Organizer for NeurIPS Physical Sciences Workshop
2024	Google Summer of Code Mentor <ul style="list-style-type: none"><li>• Directly supervised two open-source 12-week research projects with students</li></ul> Co-Coordinator of Polymathic AI's future research & development cohort
2019 - 2024	Reviewer for NeurIPS Physical Sciences Workshop
2017 - 2021	HLeptons Trigger Liaison: Trigger Studies for the ATLAS $H \rightarrow \tau\tau$ Analysis Group
2020	Session Co-Convenor, PyHEP 2020 (Conference for Python in High-Energy Physics)
2019	Reviewer for Women in Machine Learning (WiML) Workshop
2014	President, <i>The Signet Society of Arts &amp; Letters</i> , Harvard University

## Inclusion & Outreach

2022 - 2024	QuarkNet Speaker
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- Presented a talk on physics, art, and ML to high school students
  - Answered their questions in a separate hour-long interview
- 2020 Member of the American Physical Society's Inclusion, Diversity, and Equity Alliance
- 2019 - 2021 Member of the Yale Physics Climate & Diversity Committee
  - Advocated for a department-wide discussion of discrimination in our community
  - Contributed to the design of our department's Code of Conduct
- 2018 - 2020 US LHC Users Association advocacy trip to Capitol Hill
  - Met with the offices of around 15 representatives from Congress each year
  - Garnered support for high-energy physics research through DOE & NSF
- 2017 - 2018 Speaker, *Science in the News*, delivering scientific talks to the New Haven public  
Girls' Science Investigations at Yale
  - Volunteer & "ask-a-scientist" Q&A speaker
- 2016 Winner, Windy City Physics Slam at ICHEP  
Choreographer of *Form Factors*, a dance intervention with physicists at ICHEP
- 2015 - 2020 Yale Women in Physics Mentor

## Scientific Essays

- 2025 [How to Unfold with AI](#)  
*CERN Courier*, Cover Feature, Jan/Feb 2025 Edition
- 2024 [A high-dimensional jet-powered measurement of the strong force](#)  
*CERN Experimental Physics Newsletter*
- 2023 [LLMs and the Language of Science](#)  
*APS Topical Group on Data Science Newsletter*  
[xVal: A Continuous Number Encoding for LLMs](#)  
*Polymathic AI Collaboration Blog Post*
- 2018 [Theories of Everything](#)  
*Sightline Arts*  
Now or Never: The Case for a Larger Hadron Collider  
*Yale Distilled Magazine*

## Posters

- 2022 POINT CLOUD METHODS FOR PION RECONSTRUCTION IN THE ATLAS DETECTOR  
Large Hadron Collider Physics Conference, *Online*
- 2020 CHOREO-GRAF: LEARNING LATENT GRAPH REPRESENTATIONS OF THE DANCING BODY  
Women in Machine Learning (WiML) Workshop at NeurIPS, *Online*  
RNN TAU IDENTIFICATION IN THE ATLAS HIGH-LEVEL TRIGGER  
ATLAS Trigger & Data Acquisition Week at CERN, *Geneva, Switzerland*
- 2019 GENERATIVE & VARIATIONAL CHOREOGRAPHY VIA MACHINE LEARNING

Women in Machine Learning (WiML) Workshop at NeurIPS, *Vancouver, Canada*

MACHINE WOMAN: PRESERVATION, MEMORY, FORGETTING, AND AI

Women's Faculty Forum, *Yale University, New Haven, CT*

2017 PERFORMANCE OF THE ATLAS TAU TRIGGER IN RUN 2

Advanced Computing & Analysis Techniques in Physics Research (ACAT), *Seattle, WA*

2016 TRIGGER STUDIES FOR THE MU2E EXPERIMENT (**Poster Award**: top 20 out of 500)

International Conference on High Energy Physics (ICHEP), *Chicago, IL*

## Arts

### AI & Art

2023 *mememormee*: an evening-length work featuring AI-generated choreography set on six dancers, following a residency at Amherst College

- Spotlight Presentation at the 2023 NeurIPS Workshop on ML for Creativity & Design

2021 *Untitled Bird Project*: a 1 hour pop-up exhibit featuring AI-generated bird calls situated in nature

2020 *Mirror Exercise*: an AI-generated duet with myself

- Featured in *Le Mérite*, at the Comédie de Caen, Théâtre des Cordes, France.
- Highlighted in the NeurIPS Workshop on ML for Creativity and Design's [AI Art Gallery](#)
- Digital exhibition at [Level Up: The Dramaturgy of Digital Performance & Design](#)
- Selected by the AI Transparency Institute & featured at the 2020 AI Governance Forum
- Boston Cyberarts Gallery exhibition *Perceptions / Distortions* (cancelled due to COVID)

Studio fellow, *Yale Center for Collaborative Arts & Media*

- Year-long paid fellowship to develop work across art & technology

2019 *SIGMA*: a short film of AI-generated choreography

- Featured in the NeurIPS 2019 Workshop on ML for Creativity & Design's [AI Art Gallery](#)

## Live Performance

2022 Dancer, *Sublimation*

- By Kinetech Arts
- Supported by the Djerassi Resident Artists Program and Creative Work Fund
- Performed at David Ruth Glass Studio, Oakland, CA

Dancer, *Detour*

- By Kinetech Arts, commissioned by the Berkeley Dance Project
- Performed at Zellerbach Playhouse, Berkeley, CA

2020 Dancer & Coordinator, *Transpositions*

- Dancer in virtual pieces by Brian Seibert, Renee Robinson, and Elm City Dance Collective

Choreographer, *Elon Musk and the plan to Blow Up Mars the musical*

- Yale Cabaret, dir. Liam Bellman-Sharpe

Dancer, Coordinator, & Rehearsal Director, *Yale Dance Lab*

- New work by choreographer Vicky Shick: "everywhere"

- 2019 Bill T. Jones/Arnie Zane Dance Company Intensive, *Yale Dance Theater*  
• Dancer in a restaging of *D-Man in the Waters*  
Featured performer, *The Hexagonal Hive and a Mouse in a Maze*  
• Interviewed for a documentary by the Derek Jarman Lab, directed by Tilda Swinton
- 2018 Dancer, *Dance Drawings (For Jock)*  
• Choreography by Emily Coates located at the Yale Art Gallery's Sol LeWitt exhibit  
Paul Taylor Dance Company Intensive, *Yale Dance Theater*  
• Leading role as "The Hostess" in the first restaging of Taylor's *Party Mix* in four decades  
Featured performer, *Machine Woman*, dir. Anna Hagen & Jeannie Sui Wonders  
• A short film documenting my AI-generated choreography research
- 2017 Choreographer: "La Mort du Chorégraphe", *A Different Drum Dance Company*  
Urban Bush Women Intensive, *Yale Dance Theater*
- 2016 Gaga Intensive with Saar Harari & Lee Sher, *Yale Dance Theater*  
Choreographer: "Rang Cherries", *A Different Drum Dance Company*
- 2015 Actor, *Attempts on Her Life*, dir. Tania Clarke, Corpus Playroom, *University of Cambridge*  
Dancer, *Evolution*, ADC Theatre, *University of Cambridge*
- 2014 Director/Writer/Choreographer: *Symmetry Breaking*, Farkas Hall, *Harvard University*  
• My senior physics thesis: an immersive multimedia performance about the Higgs boson  
Choreographer-in-Residence, *Harvard Dance Center*  
Dancer, *Paper Wing*, chor. Jill Johnson, Farkas Hall
- 2013 *Arts@CERN* Internship  
Eurydice, *Antigonick*, dir. Ianthe Demos, American Repertory Theater Mainstage  
Isabelle & Executive Producer, *The Edge of the Map*, dir. Calla Videt (Sightline Theater Company)  
Dancer, *At Last*, Loeb Experimental Theater, Harvard University  
Dancer, *On The Run*, Harvard Dance Center
- 2012 Vice-President & Mainstage Coordinator, *The Harvard-Radcliffe Dramatic Club*  
Lucy, *CryHurtFood*, Loeb Experimental Theater & Crucible Mainstage (Sheffield, UK)  
Director: *for the purpose of catching ourselves in the act of being the most*  
• Set the Guinness World Record for the longest telephone conversation between two people
- 2011 Co-founder and collaborator, *The Harvard Generalist* artistic collective  
Drama & Dance Proctor, *Harvard University Freshman Arts Program* (2011-2014)