

Deven Misra

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CONTACT INFORMATION	Kavli Institute for the Physics and Mathematics of the Universe The University of Tokyo 5-1-5 Kashiwanoha Kashiwa City, Chiba Prefecture 277-8583, Japan
RESEARCH INTERESTS	Experimental particle physics: heavy flavor physics, machine learning, high-granularity calorimetry, fast electronics, and FPGA firmware development.
CURRENT ACADEMIC APPOINTMENTS	Graduate Student, The University of Tokyo Oct. 2024 to present Department of Physics <ul style="list-style-type: none">Affiliations:<ul style="list-style-type: none">Kavli Institute for the Physics and Mathematics of the Universe (IPMU)High Energy Accelerator Research Organization (KEK)
PREVIOUS ACADEMIC APPOINTMENTS	Research Assistant, Reed College Oct. 2023 to Oct. 2024 Department of Physics <ul style="list-style-type: none">Supervisor: Prof. Noah Charles SULI Intern, Pacific Northwest National Laboratory Sept. 2023 to Apr. 2024 Data Science & Machine Intelligence Group <ul style="list-style-type: none">Supervisor: Dr. Jan Strube Research Assistant, Reed College May 2022 to Sept. 2022 Department of Physics <ul style="list-style-type: none">Supervisor: Prof. Noah Charles Visiting Undergraduate Researcher, Johns Hopkins University May 2019 to Sept. 2019 Robot and Protein Kinematics Laboratory <ul style="list-style-type: none">Supervisor: Prof. Gregory Chirikjian
EDUCATION	The University of Tokyo, Bunkyo-ku, Tokyo, JP Ph.D. in Physics, Expected June 2029 <ul style="list-style-type: none">Thesis Topic:Adviser: Prof. Takeo HiguchiArea of Study: Experimental Particle Physics M.S. in Physics, Expected June 2026 <ul style="list-style-type: none">Thesis Topic: <i>Fast Machine Learning for the Belle II L1 Trigger</i>Adviser: Prof. Takeo HiguchiArea of Study: Experimental Particle Physics Reed College, Portland, Oregon, US B.S. in Physics, May 2022 <ul style="list-style-type: none">Thesis: <i>Multipole Moments of the Weyl-Lewis-Papapetrou Metric for an Axisymmetric Ring</i>Adviser: Prof. Joel Franklin

REFEREED CONFERENCE PUBLICATIONS	[1] H. Wu, D. Misra and G. S. Chirikjian, "Is That a Chair? Imagining Affordances Using Simulations of an Articulated Human Body," 2020 IEEE International Conference on Robotics and Automation (ICRA), Paris, France, 2020, pp. 7240-7246, doi: 10.1109/ICRA40945.2020.9197384.
CONFERENCE POSTERS	[2] D. Misra , O. Lee, H. Saberhagen, D. Schroeter and N. Charles, "Geometrically Disordered Network Models for the Integer Quantum Hall Transition via Loop Diagram Insertions", 2024 APS March Meeting, Minneapolis, Minnesota, USA, 2024.
OTHER PUBLICATIONS	[3] D. Misra , <i>Multipole Moments of the Weyl-Lewis-Papapetrou Metric for an Axisymmetric Ring</i> . Bachelor's Thesis, Reed College, Portland, OR, 2022.
TALKS & PRESENTATIONS	[1] "Geometrically Disordered Network Models for the Integer Quantum Hall Transition via Loop Diagram Insertions", American Physical Society March Meeting, March 2024. [2] "Angle Reconstruction in High-Granularity Calorimeters with Graph Neural Networks", Pacific Northwest National Laboratory Research Symposium, April 2023. [3] "Calorimeter Energy Reconstruction with Machine Learning, Pacific Northwest National Laboratory Research Symposium", December 2022. [4] "Axisymmetric Ring Sources in General Relativity", Reed College Physics Seminar, May 2022.
TEACHING EXPERIENCE	Reed College , Portland, Oregon, US <i>Grader</i> Jan. 2024 to May 2024 • Graded weekly assignments for Quantum Mechanics I (Physics 342).
AWARDS	The University of Tokyo , Bunkyo-ku, Tokyo, JP • Global Science Graduate Course Scholarship, 2024 – 2029
SKILLS	Languages: Python, Mathematica, LaTeX Libraries: PyTorch, PyG, NumPy, SciPy, Matplotlib, pandas, scikit-learn, Uproot Software: DD4hep, ROOT
CITIZENSHIP	United States of America