

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)Center for Data-Driven Discovery (CD3)
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 October 2029 <ul style="list-style-type: none">Thesis Topic:Adviser: Prof. Takeo HiguchiArea of Study: Experimental Particle Physics M.S. in Physics , Expected October 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, Julia, C++, Mathematica, LaTeX Libraries: PyTorch, PyG, Brevitas, TensorFlow, QKeras, HGQ, hls4ml Software: ROOT, DD4hep
CITIZENSHIP	United States of America