

# Department of Energy Announces \$4 Million for Research on Artificial Intelligence for High Energy Physics

Announcement Number: DE-FOA-0002705

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Principal Investigator	Title	Institution	City	State	9-digit zip code
Beauchemin, Pierre-Hugues	Improving unfolding and systematic uncertainty estimation using generative diffusion networks	Tufts University	Boston	MA	02111-1817
Caratelli, David	Advancing Artificial Intelligence with Liquid Argon Neutrino Experiments	University of California, Santa Barbara	Santa Barbara	CA	93106-2050
Eifler, Tim	Accelerating cosmological inference for LSST and DESI with neural networks	University of Arizona	Tucson	AZ	85721-0158
Hao, Yue	Artificial Intelligence Application in Nonlinear Beam Dynamics Study for Future HEP Accelerators	Michigan State University	East Lansing	MI	48824-0000
Higuera Pichardo, Aaron	Uncertainty Quantification Using Bayes Networks on Neutrino Experiments	Rice University	Houston	TX	77005-1827
Jung, Andreas	AI for a more precise future of the top quark	Purdue University	West Lafayette	IN	47906-1332
Kahn, Yonatan	Uncertainty Quantification from Neural Network Correlation Functions	University of Illinois	Champaign	IL	61820-7406
Martinez Outschoorn, Verena	New FPGA-Based NN Architectures and Autonomous Learning in Trigger Systems	University of Massachusetts	Amherst	MA	01035-9450
Okada, Nobuchika	Deep Learning Methods for Symbolic Calculations in HEP	University of Alabama	Tuscaloosa	AL	35487-0104
Regier, Jeffrey	Deep Generative Models for Transforming Pixels to Catalogs in Cosmology Analyses	University of Michigan	Ann Arbor	MI	48109-1274
Roberts, Amy	Using Generalized Adversarial Networks to ensure trusted science results and maximize science reach within the dark matter community	University of Colorado-Denver	Aurora	CO	80045-2570
Shiu, Gary	String Theory for AI	University of Wisconsin-Madison	Madison	WI	53715-1218
Strobbe, Nadja	Robustness of Machine Learning Algorithms for HEP Event Reconstruction	University of Minnesota	Minneapolis	MN	55455-2070
Trivedi, Amit	Pixel-Integrated Neural Processing for Extreme Precision Readout of Collision Events	University of Illinois Chicago	Chicago	IL	60612-4305
Wang, Haichen	Using Generative Machine Learning to Improve Performance and Physics Modeling at HEP Experiments	University of California, Berkeley	Berkeley	CA	94710-1749
Whiteson, Daniel	Blue Sky: AI-powered exploration of high-dimension theories to reveal overlooked paths to discovery	University of California, Irvine	Irvine	CA	92697-4575