

PI Name (Last, First)	Institution	State	Title	Research Area
Adam, Gina	George Washington University	DC	Neurogenesis in Neuromorphic Computing: Hippocampus-inspired Dynamic Networks	Cognitive and Computational Neuroscience
Ajoy, Ashok	University of California, Berkeley	CA	Novel Hyperpolarized Spin Sensors for Rotation and In-situ and Interfacial Chemistry	Molecular Dynamics & Theoretical Chemistry
Badran, Ahmed	Scripps Research Institute	CA	Biological CO2 Recycling for Long-Term Space Exploration	Natural Materials, Systems, & Extremophiles
Balakrishna, Ananya	University of Southern California	CA	Microstructural Design of Light-induced Phase Transformation Materials	Materials with Extreme Properties
Blok, Machiel	University of Rochester	NY	Be Non Linear: Bosonic Encodings in NOise-resilient Circuits with Strong Non-LINEARity	Quantum Information Sciences
Brown, Philip	University of Colorado, Colorado Springs	CO	Novel Metrics and Randomized Algorithms for Robust Networked Multiagent Coordination	Complex Networks
Bucsek, Ashley	University of Michigan	MI	Supercritical Phase Transformations for Multiferroic Materials	Materials with Extreme Properties
Carbajo, Sergio	University of California, Los Angeles	CA	Innovative nonlinear transmission line technologies to enable modular, scalable HPM systems	Laser & Optical Physics
Chabi, Sakineh	University of New Mexico	NM	Two-dimensional Silicon Carbide for Future Optoelectronics and Photonics	Optoelectronics & Photonics
Chu, Xiangliang	University of Colorado, Boulder	CO	Understand and Forecast Killer Electrons: Coupling Machine Learning and First-principle Simulations	Space Science
Cole, Justin	University of Colorado, Boulder	CO	Topological Insulators in Magneto-optical Media	Electromagnetics
Covey, Jacob	University of Illinois, Urbana-Champaign	IL	Quantum Computing - Real-time feedback for Rydberg atom arrays	Quantum Information Sciences
Davarnia, Danial	Iowa State University of S & T	IA	A Novel Graphical Method to Globally Solve Mixed-Integer Nonlinear Programs	Mathematical Optimization
Dresselhaus-Marais, Leora	Stanford University	CA	Visualizing Ultrafast Plasticity with X-ray Diffraction Microscopes	Dynamic Materials & Interactions
Etesami, Rasoul	University of Illinois, Urbana-Champaign	IL	Robust and Optimal Resource Allocation over Networks Subject to Externalities	Complex Networks
Fan, Chuchu	Massachusetts Institute of Technology	MA	High Coverage and Low Cost Automatic Testing for Intelligent Autonomous Systems	Agile Science for Test & Evaluation
Gayles, Jacob	University of South Florida	FL	Interfaces in Quantum Chiral Materials: Skyrmion/Weyl systems for efficient spin manipulation	Condensed Matter Physics
Hale, Matthew	University of Florida	FL	A Morse-Theoretic Approach to Non-Convex Optimization	Dynamical Systems & Control Theory
Hofstrand, Andrew	New York Institute of Technology	NY	Coherent Structures on Topological Lattices	Electromagnetics
Huang, Cheng	University of Kansas Center for Research, Inc.	KS	Generalizable Data-Driven Modeling Framework for Understanding and Modeling Turbulent Combustion	Energy, Combustion, & Non-Equilibrium Thermodynamics
Jahed, Zeinab	University of California, San Diego	CA	Reconstruction of neuron potentials with convolutional neural networks trained on nanoelectrode recordings	Biophysics
Jin, Chenhao	University of California, Santa Barbara	CA	Visualization and Control of Unconventional Magnons in Two Dimensions	Condensed Matter Physics
Katsumata, Reika	University of Massachusetts, Amherst	MA	Confinement Effects on Polymer Degradation in Nanocomposites	Aerospace Composite Materials
Kaufman, Adam	University of Colorado, Boulder	CO	Fast, Mid-Circuit Measurement for Quantum Science with Neutral Atoms	Atomic & Molecular Physics
Lee, Kyusang	University of Virginia	VA	Dynamics of Charge and Energy Transport in 2D/3D Mixed-dimensional Heterostructures enabled by Remote Epitaxy and Layer Resolved Splitting	Physics of Remote Sensing
Li, Sharon	University of Wisconsin	WI	Human-Aligned Learning in the Open World (HALLOW)	Science of Information, Computation, Learning, & Fusion
Li, Wuchen	University of South Carolina	SC	Transport Information Geometric Computations	Computational Mathematics
Liao, Chen-Ting	University of Colorado, Boulder	CO	Towards Entangled and Squeezed Quantum X-Rays	Ultrashort Pulse Laser-Matter Interactions
Lin, Dingchang	Johns Hopkins University	MD	Engineering in-cellulo Mesoporous Protein Crystals as Genetically Programmable Functional Biomaterials	Natural Materials, Systems, & Extremophiles
McClain, Monique	Purdue University	IN	Enhanced Microstructural Control of Plastic Bonded Explosives via Additive Manufacturing	Dynamic Materials & Interactions
Menold, Jessica	Pennsylvania State University	PA	Towards the Characterization of Communicative, Behavioral, and Physiological Signals During Team Facilitation Events to Support Human-machine Teaming	Trust and Influence
Mirhosseini, Mohammad	California Institute of Technology	CA	Quantum Computing- Encoding Bosonic Qubits in Long-Lived Phonons	Quantum Information Sciences
Najem, Joseph	Pennsylvania State University	PA	Nonlinear Programs	Mechanics of Multifunctional Materials & Microsystems
Ornik, Melkior	University of Illinois, Urbana-Champaign	IL	Resilience and Guaranteed Task Completion for Partially Unknown Nonlinear Control Systems	Dynamical Systems & Control Theory
Pal, Raj Kumar	Kansas State University	KS	Reservoir Computing Metamaterials for Dynamically Reconfigurable Structures	Multi-Scale Structural Mechanics and Prognosis
Patterson, Evan	Topos Institute	CA	Functorial Semantics and Diagrammatic Languages for Statistical Theories and Models	Information Assurance & Cybersecurity
Petro, Elaine	Cornell University	NY	Investigating the chemical stability of ionic liquid ions during energy transfer events	Propulsion & Power
Poulikakos, Lisa	University of California, San Diego	CA	Nano-Optical and Plasmo-Acoustic Metasurfaces for High-Resolution, Non-Intrusive Flow Visualization in Gases and Plasma	Propulsion & Power
Radulaski, Marina	University of California, Davis	CA	Triangular Photonic Crystals with Integrated Color Centers for Quantum Mesh Photonics in Silicon Carbide	Optoelectronics & Photonics
Rand, Robert	University of Chicago	IL	Formally Verifying Graphical Quantum Calculi	Information Assurance & Cybersecurity
Rao, Siyuan	University of Massachusetts, Amherst	MA	Non-invasive Cell-type-specific Magnetic Neural Modulation	Human Performance & Biosystems
Restuccia, Francesco	Northeastern University	MA	Assured Wireless Operations Through Dynamic Data-Driven Open Radio Access Systems	Dynamic Data & Information Processing
Romero, Nathan	University of California, San Diego	CA	Vicinal Frustrated Lewis Pair Polymers for Dynamic, Stimuli-Responsive, and Energy-Dissipating Materials	Organic Materials Chemistry
Schmidt, Bryan	Case Western Reserve University	OH	Effect of Particulates and Free Stream Disturbances on Hypervelocity Boundary Layer Transition	High-Speed Aerodynamics
Shi, Xian	University of California, Irvine	CA	Unraveling and Manipulating Transverse Wave Dynamics in Detonation Systems: Reactivity, Stability, and Multiplicity	Energy, Combustion, & Non-Equilibrium Thermodynamics
Shortland, Neil	University of Massachusetts, Lowell	MA	Understanding Influence using Personality-driven Profiles and Prevention (IP3).	Trust and Influence
Stephens, Jacob	Texas Tech University	TX	Quantum-Regime X-Ray Emission Technologies	Plasma & Electro-energetic Physics
Tallman, Tyler	Purdue University	IN	Data Fusion for Self-Sensing Additively Manufactured Polymer Matrix Composite State Awareness	Dynamic Data & Information Processing
Wang, Yao	Clemson University	SC	Theoretical Study for Infinite-Layer Nickelate Superconductors	GHz-THz Electronics
Witherden, Freddie	Texas A&M University	TX	Next Generation High-Order Methods for Multi-Physics Multi-Scale Problems	Computational Mathematics
Wu, Jiajun	Stanford University	CA	A Theory-Based Concept Learning Framework for Perception, Reasoning, and Planning	Computational Cognition and Machine Intelligence
Wu, Sanfeng	Princeton University	NJ	Discovering, Enhancing and Engineering Two-Dimensional Superconductivity	GHz-THz Electronics
Yang, Xiang	Pennsylvania State University	PA	Extrapolative, progressive machine learning for turbulence modeling	Unsteady Aerodynamics & Turbulent Flows
Zare, Armin	University of Texas, Dallas	TX	Stochastic modeling and analysis of random surface roughness	Unsteady Aerodynamics & Turbulent Flows
Zhang, Xiaojia	University of Illinois, Urbana-Champaign	IL	Optimization-guided Synthesis of Composite Flight Structures with Unprecedented Strength and Fracture Resistance	Multi-Scale Structural Mechanics and Prognosis
Zhao, Renee	Stanford University	CA	Pixelized Composites with Programable Stiffness Distribution for Acoustic Wave Manipulation	Aerospace Composite Materials
Zhukhovitskiy, Aleksandr	University of North Carolina, Chapel Hill	NC	Dinuclear Polymerization and Self-Assembly of Conjugated Polymer Nanowire Heterojunctions Toward Structure-Photodetection Relationships	Organic Materials Chemistry
Zou, Ying	University of Alabama, Huntsville	AL	Thermospheric Winds around the Cusp	Space Science