FTS   Alloc, Hussein   University of Central Rends   Rocharter, W   Stak-Auger Modeling of discipling and Moling In HD     BES   Algority, Lucz   Linkersity of Central Rends   Orlands, H   New particulation numbers of transmoother methods for attraction methods for attraction methods.     BES   Augustyn, Veronica   North Carolina State University   Orlands, H   New particulation numbers of transmoother methods.     BES   Augustyn, Veronica   North Carolina State University   Orlands, H   New particulation numbers of transmoother methods.     BES   Augustyn, Veronica   North Carolina State Intervisity   Orlands, H   New particulation numbers of transmoother methods.     BES   Constructiona, Kirtsin   Arche Knotheres National Laboratory (IRNL)   Dubles of transmoothere on Intervisity   Statetracear angeing of transmootheres on Intervisity     BES   Constructiona, Mortha   Render University   Relinitary, NA   Replay particip Central Mathemate Entruction Intervisity     BES   Constructiona, Mortha   Territy University   Particip Central Mathemate Entruction Intervisity     BS   Constructiona, Mortha   Territy University   Particip Central Mathemate Entruction Intervisity     BS   Constructiona,	Office	PI Name (Last, First)	Institution	City, State	Title
BES   Agerent, Luca   University of Campai Fonda   Direction of Campai Fonda     BES   Adjustry, Veronca   Nurth Carolies State University   Raingh, NC   Probagi Electrodemical Bacterial State University     MES   Adjustry, Veronca   Nurth Carolies State University   Raingh, NC   Probagi Electrodemical Bacterial Materials     ME   Socialed Lein   Oak Ridge National Laboratory (DNNL)   Oak Ridge National Laboratory (DNNL)   Patient State May Campai State University     MED   Consiler Res Physics State University   Rohner, MD   Boosting ress Physics States University     MED   Consiler, Waiana   Brockheere National Laboratory (DNNL)   Up to , W   Boosting ress Physics States University     MED   Consiler, State University   Railmaner, MD   Development of Nace Fondamics Concurrence     MES   Contradition, Matha   Temple University   Philadediplia, PA   C Development of Nace Fondamics Concurrence     MES   Contradition, Matha   Temple University   Philadediplia, PA   C Development of Nace Fondamics Concurrence     ME   Contradition, Matha   Temple University   Philadediplia, PA   C Development of Nace Fondamics Concontraditions of Nacaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa	FES	Aluie, Hussein	University of Rochester	Rochester, NY	Scale-Aware Modeling of Instabilities and Mixing in HED Flows
BES   Augustyn, Veronka   Nerth Carolina State University   Ralegity, NC   Problem Electrocenterial Rescurving Verse Nanoconfinements     NP   Drouklad, Leah   Ock Ridge National Laboratory (DRNL)   Ock Ridge, TN   Systematics of Precision Nature Physics Experiments     BER   Durrum-Johnson, Kristin   Pacific Northwest National Laboratory (DNNL)   Ock Ridge, TN   Systematics of Precision Nature Physics Experiments     IEEP   Careliner, Viciana   Drobitave National Laboratory (DNNL)   DRIInal, WA   Spatial Systematics   Systematics     IEEP   Careliner, Viciana   Drobitave National Laboratory (DNNL)   Dak Ridge, TN   Boolengenet af Neoro Hebrinavie Robiting Compounds     IEEP   Careliner, Viciana   Drobitave National Laboratory (DNNL)   Dak Ridge, TN   Problemment Systematic   Problemment Systematic   Problemment Systematic   Problemment Systematic   Problemment Systematics	BES	Argenti, Luca	University of Central Florida	Orlando, FL	New correlated numerical methods for attosecond molecular single and double ionization
NP   Brousseria, Lah   Oak Rigg, TN   Systematics of Precision Alexano Physics Experiments     BER   Durnum-schnson, Kristin   Pacific Northwest National Laboratory (PNNL)   Richland, WA   Spatiations participation anaging of gioscicabulas econoposition by a naturally evolved fungal garden microbial contortium a naturally evolved fungal garden microbial contortium and the previous status and th	BES	Augustyn, Veronica	North Carolina State University	Raleigh, NC	Probing Electrochemical Reactivity Under Nanoconfinement Using Molecularly Pillared Two Dimensional Materials
BER   Burrum-Johnson, Kristin   Patclic Northwess National Laboratory (PNL)   Rishland, WA   Spatiatemporal mapping dimensionation they a naturally revealed fungal guidem microbial consortium     HEP   Cavallere, Wriana   Brockhoven National Laboratory (PNL)   Uptors, NY   Rootsing new physics searches with Higgs differential consortium     BES   Oheng, Lan   Johns Hopkins University   Saltomore, MD   Development of New/I Relativatic Electronic Structure     BES   Oheng, Lan   Johns Hopkins University   Saltomore, MD   Development of New/I Relativatic Electronic Structure     BES   Contract, Robert   University of Adamsas   Payeterville, AR   Development of New/I Relativatic Electronic Structure     BES   Carlain, Robert   University of Maryland   Collage Park, MD   University of Newsure     NP   Devolud, Zohreh   University of Maryland   Collage Park, MD   Analega and Delat Quarium Sinulations of Strongly     HEP   Darkin, Shudepto   University of Karlynad   Collage Park, MD   Analega and Platonachina Sinulations of Strongly     HEP   Darkin, Shudepto   University of Carlfornia, Los Angeles   Los Angeles, CA   Ware Totacity and Burlindon Natores Finglion     HEP	NP	Broussard, Leah	Oak Ridge National Laboratory (ORNL)	Oak Ridge, TN	Systematics of Precision Neutron Physics Experiments
HEP   Civalians, Viviana   Brookhaven National Laboratory (BNL)   Upton, NV   Boosting mew phycic services with Higgs offerential coss- cencion measurements.     BES   Cheller, Lin   John Hopkins Schwirzly   Baltimore, MD   Development of New Hissis Electronic Structure Methods for Nathible Containing Consults (Electronic Structure Methods for Nathible Containing).     BES   Containin, Martha   The physical Relations I Electronic Structure Methods for Nathible Containing Co	BER	Burnum-Johnson, Kristin	Pacific Northwest National Laboratory (PNNL)	Richland, WA	Spatiotemporal mapping of lignocellulose decomposition by a naturally evolved fungal garden microbial consortium
BES   Cheng, Lan   Johns Topoliski Uliversity   Battimore, MD   Development of Novel Relativistic Electronic Structure Methods for Actinide, Company, Groupouts     RES   Conk, Matofing   Oak Ridge, TN   Probing Anionic Electron Behavior In Blexified Composition, Martha   Time Construction Behavior In Blexified Construction, Martha   Time Construction Behavior In Blexified Construction, Base Status     RES   Confain, Robert   University of Arkanas   FightTifleiners, Status   HightTifleiners, Status     RES   Cubing, Scott   California institue of Technology   Paadona, CA   Using Ulivasis franciscums Simulation of Storely Alteracting Theorem Status     NP   Davoudi, Zohreh   University of Maryland   College Park, MD   Alteracting Theorem Status   Storely Storely Coupled Caustrum Field Storely Alteracting Theorem Status     RES   Disbari, Shudipto   University of Nethonska Lincoln   Uncoln, NE   Point Inspired Innomers with up In State Ion Channels for High tos Conductivity and Printocial Particles with Galaxies     RES   Haherty, David   University of Altona   Ticcon, A2   Multi-Probe Conneight Market Carino hands for High Status   Status     RES   Raikets, Greeshma   Cornell University of New Hampshire   Durham, NH   Nuclean Attopphysite Walaxies on Cauph	HEP	Cavaliere, Viviana	Brookhaven National Laboratory (BNL)	Upton, NY	Boosting new physics searches with Higgs differential cross- section measurements
BES   Only, Magding   Operating   Operating   Problem, Allowed Sector     NP   Constantion, Martha   Temple University   Problem, Allowed Sector   Problem, Allowed Sector     BES   Contrain, Robert   University of Arkansas   Payetter/lise, AR   High Efficiency, Solid   California institute of Technology     NP   Davoudi, Zohreh   University of Maryland   Collage Park, MO   Analyzing of Depart Solution of Optical Countrom Sector     RES   Dishari, Shudipto   University of Maryland   Collage Park, MO   Analyzing of Depart Counters with Journey Sector     RES   Dishari, Shudipto   University of Nebraska Lincoln   University of Nebraska Lincoln   University of Nebraska Lincoln     HEP   Dumitrescu, Thomas   University of Allowersity   Cambridge, MA   Discovering Dav Mark Collary Sector     HEP   Dumitrescu, Thomas   University of Allowersity   Cambridge, MA   Discovering Dav Mark Collary Sector     HEP   Effer, Tim   University of Allowersity   Cambridge, MA   Discovering Dav Mark Collary Sector     HEP   Effer, Tim   University of Allowersity   Champaign, L   The Real Coopeparatile Interector and Mark Seco	BES	Cheng, Lan	Johns Hopkins University	Baltimore, MD	Development of Novel Relativistic Electronic Structure Methods for Actinide-Containing Compounds
NP   Constantiou, Martha   Temple Investigy   Philadelphia, PA   EIC Uprices for Analytics Color     BES   Constantiou, Martha   Engletification   Engletification   Engletification     BES   Constantiou, Martha   Engletification   Engletification   Engletification     BES   Cushing, Soott   California Institute of Technology   Psisieno, CA   Ling Unification Constaliation to Measure the Temporal University of Maryland     NP   Devoud, Zohreh   University of Maryland   College Park, MD   Analog and Discoursing Dark Market Changes and Prinnordial Particles on Mouse Provide Constructivity and Selectivity     MEP   Dumitrescu, Thomas   University of California, Los Angeles, CA   New Tools for Strongy Coupled Quantum Field Theories     MEP   Dumitrescu, Timan   University of Arizona   Tecson, AZ   New Tools for Strongy Coupled Quantum Field Theories     BES   Flaherty, David   University of Arizona   Tecson, AZ   Neuriescu Multi-Phose Cosmology with DE and LST     BES   Flaherty, David   University of New Hampshire   Durham, NH   Nuclear Attrophysicuunified of the Conineary with D	BES	Chi, Miaofang	Oak Ridge National Laboratory (ORNL)	Oak Ridge, TN	Probing Anionic Electron Behavior in Electrides
BES   Cubical, Robel 1   University of Andreads   Prevention     BES   Cubical, Robel 1   California Institute of Technology   Pasadena, CA   Using Uttrates Cartonics   Using Uttrates Cartonics     NP   Davoud, Zohreh   University of Manyland   College Park, MD   Anargement Studiation of Using Uttrates of Cartonics of Strongly University of Nanyland     RES   Dishari, Shudipito   University of Nanyland   College Park, MD   Anargement Studiations in Nuclear Physics     REP   Dumitresco, Thomas   University of California, Los Angeles   Los Angeles, CA   New Tools Tor Strongly Coulde Caustum Find Theories     HEP   Dumitresco, Thomas   University of Tainona   Tascon, A2   Autil: Proto Carconicagu with DS and Phinordial Particles with California, Los Angeles     HEP   University of Ealitornia   Tascon, A2   Autil: Proto Carconicagu with DS and Phinordial Particles with California Institutes of Technology and Phinordial Particles with California Institutes of Technology and Phinordial Statter Changes Suffaces, Technology and Phinordial Statter Phinordial Statter Changeseres and Phinordial Statter Phino	NP	Constantinou, Martha	Temple University	Philadelphia, PA	EIC physics from Lattice QCD
BES   Cubing, Scott   California Institute of Technology   Plaadena, CA   Using Uttransit Technology   Plaadena, CA     NP   Davoudi, Zohreh   University of Maryland   College Park, MD   Analog and Digital Quantum Simulations of Strongly Uptically Excited Molecular Learning Immunity of Maryland     BES   Dishari, Shudipto   University of Nebraska-Uncoin   Lincoin, NE   Point Inspired Ionones with Sub-ma Gated Ionones for Majocitory and Selectivity     HEP   Dumitrescu, Thomas   University of California, Los Angeles.   Los Angeles, CA   New Tools for Strongly Coulde Quantum Field Theories     HEP   Diversity of California, Los Angeles.   Los Angeles, CA   New Tools for Strongly Coulde Quantum Field Theories     HEP   Diversity of California, Los Angeles.   Los Angeles, CA   New Tools for Strongly Couperative Intractoms Anong Surfaces, Surface,	BES	Coridan, Robert	University of Arkansas	Fayetteville, AK	High-Efficiency Solar-10-Fuel Photoelectrochemistry in Disordered Photonic Glass Electrodes
NP   Davoudi, Zohreh   University of Maryland   College Park, MD   Analog and Digital Quantum Simulations of Strongly     BES   Dishari, Shudipto   University of Nebraska Lincoin   Lincoin, NE   Perin inspirate functions with sub-m Gated on Channels for Hgh Ion Conductivity and Selectivity.     HEP   Dumitrescu, Thomas   University of California, Los Angeles   Los Angeles, CA   New Tools for Strongly Coupled Quantum Field Theories     HEP   Deorkin, Cora   Harvard University   Cambridge, MA   Discovering Dark Natter: Cumps and Primordial Particles with Galaxies     HEP   Effler, Tim   University of Atazona   Tuccon, AZ   Multi-Probe Camplage with DEs and LST     NP   Faberty, David   University of New Hampshire   Durham, NH   Nuclear Attrophysics through simulations of neutron start     NP   Foucart, Francois   University of New Hampshire   Durham, NH   Nuclear Attrophysics through simulation transform     BES   Gadikota, Greeshma   Cornell University*   Ithaca, NY   Mechanistic Turing of Chanical Transformations for Coupling the Geo-minicry of Acid Gas Storage with Delign Stateging to Produce Clean Energy Camiers in Multi Phase Reaction Environments (MATTER)* *reproval anginary, somethy of Missioni     HEP   Gadikota, Greeshma   SLAC Na	BES	Cushing, Scott	California Institute of Technology	Pasadena, CA	Using Ultrafast Entangled Photon Correlations to Measure the Temporal Evolution of Optically Excited Molecular Entanglement
BES   Dishari, Shudipto   University of Nebraska-Lincoln   Uncoin, NE   Provincing Complexity and Selectivity     HEP   Dumitrescu, Thomas   University of California, Los Angeles   Los Angeles, CA   New Tools for Strongly Coupled Quantum Field Theories     HEP   Divorkin, Cora   Han-ard University   Cambridge, MA   Discorring Dark Matter Clumps and Primordial Particles with Galavies     IMP   Effer, Tim   University of Artiona   Tucson, AZ   Multi-Probe Cosmology with DES and LST     BES   Flaherty, David   University of Artiona   Tucson, AZ   Multi-Probe Cosmology with DES and LST     NP   Foucart, Francois   University of New Hampshire   Durham, NH   Nuclear Astrophysics through simulations of neutron star     BES   Gadikota, Greeshma   Cornell University*   Ithaca, NY   Mechanistic Tuning of Chemical Transformations for Coupling the Geo minicry of Acid Gas Storage with Design Strategies to Produce Clean Energy Carriers in Multi-Phase Reaction Technology discores and paradoxing and paradox	NP	Davoudi, Zohreh	University of Maryland	College Park, MD	Analog and Digital Quantum Simulations of Strongly Interacting Theories for Applications in Nuclear Physics
HEP   Dumitrescu, Thomas   University of California, Los Angeles   Los Angeles, CA   New Tools for Strongly Coupled Quantum Field Theories     HEP   Diverkin, Cora   Harvard University   Cambridge, MA   Discovering Dark Matter Clumps and Primordial Particles with Galaxies     HEP   Elifler, Tim   University of Arizona   Tucson, AZ   Multi-Probe Cosmology with DES and LST     BES   Flaherty, David   University of Illinois   Champagin, IL   The Rodo Cooparatives on Catalysis at Liquid     NP   Foucart, Francois   University of New Hampshire   Durham, NH   Nuclear Astrophysis: through simulations of neutron star mergers using Monte-Carlo neutrino radiation transport     BES   Gadikota, Greeshma   Cornell University*   Ithaca, NY   Mechanistic Tuning of Chemical Transformations for Coupling the Geo-minicry of Acid Gas Storage with Design Strategies to Produce Claan Energy Carriers in Multi-Phase Reaction     HEP   Gamina, Diana   SLAC National Accelerator Laboratory   Menlo Park, CA   Werefastion of the Lextromagnetic Waves of a Laser Calibration System for the DUNE Far Detector     FES   Galaginni, Sowjanya   University of Tennessee   Knowille, TN   Development of a Laser Calibration System for the DUNE Far Detector     FES   Hammond, Karl <t< td=""><td>BES</td><td>Dishari, Shudipto</td><td>University of Nebraska-Lincoln</td><td>Lincoln, NE</td><td>Porin Inspired Ionomers with sub-nm Gated Ion Channels for High Ion Conductivity and Selectivity</td></t<>	BES	Dishari, Shudipto	University of Nebraska-Lincoln	Lincoln, NE	Porin Inspired Ionomers with sub-nm Gated Ion Channels for High Ion Conductivity and Selectivity
HEP   Dorokin, Cora   Harvard University   Cambridge, MA   Discovering Dark Matter Clumps and Primordial Particles with Galaxies     HEP   Elifer, Tim   University of Arizona   Tucson, AZ   Multi-Probe Coenology with DES and LSST     BES   Flaherty, David   University of Illinois   Champaign, IL   The Role of Cooperstive Interactions Among surfaces, Sold Interfaces     NP   Foucart, Francois   University of New Hampshire   Durham, NH   Nuclear Astrophysics through simulations of neutron start mergers using Monte-Carlo neutrino radiation transport     BES   Gadikota, Greeshma   Cornell University of Mascarbatory   Menlo Park, CA   Mechanist Carlo neutrino radiation transport     HEP   Galapinni, Sowjanya   University of Tennessee   Knoxville, TN   Development of a Lacer Calbriston in Vucle Using Electro- indication	HEP	Dumitrescu, Thomas	University of California, Los Angeles	Los Angeles, CA	New Tools for Strongly Coupled Quantum Field Theories
HEP   Eiller, Tim   University of Arizona   Tucson, AZ   Multi-Probe Cosmology with DES and LST     BES   Flaherty, David   University of Illinois   Champaign, IL   The Role of Cooperative Interactions Among Surfaces, Solvents, and Reactive Interactions, Solvents, and Reactive Interaction with Design Submitted by the Produce Clean Energy Carriers in Multi-Phase Reaction Environments (MATTER), <i>Proposal original submitted</i> by the Produce Clean Energy Carriers in Multi-Phase Reaction Environments (MATTER), <i>Proposal original submitted</i> by the Produce Clean Energy Carriers in Multi-Phase Reaction Environments (MATTER), <i>Proposal original submitted</i> by the Produce Clean Energy Carriers in Multi-Phase Reaction Environments (MATTER), <i>Proposal original submitted</i> by the Produce Clean Energy Carriers in Multi-Phase Reaction Environments (MATTER), <i>Proposal original submitted</i> by the Produce Clean Energy Carriers in Multi-Phase Reaction Environments (MATTER), <i>Proposal original submitted</i> by the Produce Clean Energy Carriers in Multi-Phase Reaction Environments (MATTER), <i>Proposal original submitted</i> by the Produce Clean Energy Carriers in Multi-Phase Reaction Environments (MATTER), <i>Proposal original submitted</i> by the Produce Clean Energy Carriers in Multi-Phase Reaction Environments (MATTER), <i>Proposal original submitted</i> by the Produce Clean	HEP	Dvorkin, Cora	Harvard University	Cambridge, MA	Discovering Dark Matter Clumps and Primordial Particles with Galaxies
BES   Flaherty, David   University of Illinois   Champaign, IL   The Role of Cooperative Interactions Among Surfaces, Solvents, and Reactive Internetiates on Catalysis at Liquid- Solid Interfaces     NP   Foucart, Francois   University of New Hampshire   Durham, NH   Nuclear Astrophysics through simulations of neutron star mergers using Monte-Carlo neutrino radiation transport     BES   Gadikota, Greeshma   Cornell University*   Ithaca, NY   Mechanistic Tuning of Chemical Transformations for Coupling the Geo-mimicry of Acid Gas Storage with Design Strategies to Produce Clean Energy Carlieris in MultPhase Reaction Environments (MATTER)     HEP   Gamina, Diana   SLAC National Accelerator Laboratory   Menio Park, CA   Wechanistic of Material' Interaction with Electromagnetic Waves in Accelerator Catilies     FES   Gleason, Arianna   SLAC National Accelerator Laboratory   Menio Park, CA   Ultrafast visualization of hydrodynamic evolution: understanding void Collapse at extrem high-pressure conditions     HEP   Gollapinni, Sowjanya   University of Tennessee   Knoxville, TN   Development of a Laser Calibration System for the DUNE Far Development of a Storage Correlations in Nuclei Using Electro- induced Nucleon-knockock Reactions at High Momentum- transfer     NP   Hen, Or   Massachusetts, Amherst   Hadley, MA   Optimization and Calibration of a 4He-based Detector or Linhamed Nucleon-knockock R	HEP	Eifler, Tim	University of Arizona	Tucson, AZ	Multi-Probe Cosmology with DES and LSST
NP   Foucart, Francois   University of New Hampshire   Durham, NH   Nuclear Astrophysics through simulations of neutron star mergers using Monte Carlo neutrino radiation transport     BES   Gadikota, Greeshma   Cornell University*   Ithaca, NY   Mechanistic Tuning of Chemical Transformations for Coupling the Geo-minicry of Acid Gas Storage with Design Strategies to Produce Clean Energy Carriers in Multi-Phase Reaction     HEP   Gamzina, Diana   SLAC National Accelerator Laboratory   Menlo Park, CA   Mechanistic Tuning of Chemical Transformatice to Produce Clean Energy Carriers in Multi-Phase Reaction     HEP   Gallapinni, Sowjanya   SLAC National Accelerator Laboratory   Menlo Park, CA   Mechanics of Materials' Interaction with Electromagnetic Waves in Accelerator Cavities     HEP   Gollapinni, Sowjanya   University of Tennessee   Knoxville, TN   Development of a Laser Calibration System for the DUNE Far Detector     FES   Hammond, Karl   University of Missouri   Columbia, MO   Uthinum-Divertor Interactions and Helium/Hydrogen Trapping in University of Massachusetts Institute of Technology   Cambridge, MA   Study of Short-Range Correlations in Nuclei Using Electro- induced Nucleon-Anockout Reactions at High Momentum- transfer     HEP   Hertel, Scott   University of Rochester   Rochester, NY   Modeling electronoic interactins and multiletectron reactivity of a	BES	Flaherty, David	University of Illinois	Champaign, IL	The Role of Cooperative Interactions Among Surfaces, Solvents, and Reactive Intermediates on Catalysis at Liquid- Solid Interfaces
BES   Gadikota, Greeshma   Cornell University*   Ithaca, NY   Mechanistic Tuning of Chemical Transformations for Coupling the Geo-mimicry of Acid Gas Storage with Design Strategies to Produce Claen Energy Carries in Multi-Phase Reaction Environments (MATTER)   **roposal originally submitted by the University of Wiscosin     HEP   Gamzina, Diana   SLAC National Accelerator Laboratory   Menio Park, CA   Mechanics of Materials' Interaction with Electromagnetic Waves in Accelerator Cavities     FES   Gleason, Arianna   SLAC National Accelerator Laboratory   Menio Park, CA   Ultrafast Visualization of hydrodynamic evolution: understanding void collapse at extreme high-pressure conditions     HEP   Gollapinni, Sowjanya   University of Tennessee   Knoxville, TN   Development of a Laser Calibration System for the DUNE Far Detector     FES   Hammond, Karl   University of Missouri   Columbia, MO   Lithium-Divertor Interactions and Helium/Hydrogen Trapping in Lithiated Metals     NP   Hen, Or   Massachusetts Institute of Technology   Cambridge, MA   Study of Short-Range Correlations in Nuclei Using Electro- induced Nucleon-knockout Reactions at High Momentum- transfer     HEP   Hertel, Scott   University of Massachusetts, Amherst   Hadley, MA   Optimization and Calibration of a 4He-based Detector for Low-Mass Dark Matter     BES   Huang,	NP	Foucart, Francois	University of New Hampshire	Durham, NH	Nuclear Astrophysics through simulations of neutron star mergers using Monte-Carlo neutrino radiation transport
HEP   Gamzina, Diana   SLAC National Accelerator Laboratory   Menlo Park, CA   Mechanics of Materials' Interaction with Electromagnetic Waves in Accelerator Cavities     FES   Gleason, Arianna   SLAC National Accelerator Laboratory   Menlo Park, CA   Ultrafast visualization of hydrodynamic evolution: understanding void collapse at extreme high-pressure conditions     HEP   Gollapinni, Sowjanya   University of Tennessee   Knoxville, TN   Development of a Laser Calibration System for the DUNE Far Detector     FES   Hammond, Karl   University of Missouri   Columbia, MO   Lithium-Divertor Interactions and Helium/Hydrogen Trapping in Lithiated Metals     NP   Hen, Or   Massachusetts Institute of Technology   Cambridge, MA   Study of Short-Range Correlations in Nuclei Using Electro-induced Nucleon-knockout Reactions at High Momentum-Transfer     HEP   Hertel, Scott   University of Rochester   Rochester, NY   Modeling electronic interactions and multielectron reactivity of actinide surfaces: Synthesis, characterization, and reactivity of actinide surfaces: Synthesis, Characterization, and reactivity of actinide-functionalized polyxoxanadates     BES   Huang, Jier   Marquette University   Milwaukee, WI   Design and Structural Analyses of 2D COFs as Single-Site CO2 Reduction Catalysis     ASCR   Idreos, Stratos   Harvard University	BES	Gadikota, Greeshma	Cornell University*	Ithaca, NY	Mechanistic Tuning of Chemical Transformations for Coupling the Geo-mimicry of Acid Gas Storage with Design Strategies to Produce Clean Energy Carriers in Multi-Phase Reaction Environments (MATTER) *Proposal originally submitted by the University of Wisconsin
FES   Gleason, Arianna   SLAC National Accelerator Laboratory   Menlo Park, CA   Ultrafast visualization of hydrodynamic evolution: understanding void collapse at extreme high-pressure conditions     HEP   Gollapinni, Sowjanya   University of Tennessee   Knoxville, TN   Development of a Laser Calibration System for the DUNE Far Detector     FES   Harmond, Karl   University of Missouri   Columbia, MO   Lithium-Divertor Interactions and Helium/Hydrogen Trapping in Lithiated Metals     NP   Hen, Or   Massachusetts Institute of Technology   Cambridge, MA   Study of Short-Range Correlations in Nuclei Using Electro- induced Nucleon-knockout Reactions at High Momentum- Transfer     HEP   Hertel, Scott   University of Massachusetts, Amherst   Hadley, MA   Optimization and Calibration of a 4He-based Detector for Low-Mass Dark Matter     BES   Hicks (Matson), Ellen   University of Rochester   Rochester, NY   Modeling electronic interactions and multielectron reactivity of actinide ions on metal-oxide surfaces: Synthesis, characterization, and reactivity of Auride-Surdues, Surtaces: Synthesis, characterization, and reactivity of Auride-functionalized polyxovanadates     BES   Huang, Jier   Marquette University   Cambridge, MA   Data Structure Alchemy     HEP   Jeanty, Laura   University of Oregon   Eugene, OR   <	HEP	Gamzina, Diana	SLAC National Accelerator Laboratory	Menlo Park, CA	Mechanics of Materials' Interaction with Electromagnetic Waves in Accelerator Cavities
HEP Gollapinni, SowjanyaUniversity of TennesseeKnoxville, TN DetectorDevelopment of a Laser Calibration System for the DUNE Far DetectorFESHammond, KarlUniversity of MissouriColumbia, MOLithium-Divertor Interactions and Helium/Hydrogen Trapping in Lithiated MetalsNPHen, OrMassachusetts Institute of TechnologyCambridge, MAStudy of Short-Range Correlations in Nuclei Using Electro- induced Nucleon-knockout Reactions at High Momentum- TransferHEPHertel, ScottUniversity of Massachusetts, AmherstHadley, MAOptimization and Calibration of a 4He-based Detector for Low-Mass Dark MatterBESHicks (Matson), EllenUniversity of RochesterRochester, NYModeling electronic interactions and multielectron reactivity of actinide ions on metal-oxide surfaces: Synthesis, characterization, and reactivity of actinide-functionalized polyoxonadatesBESHuang, JierMarquette UniversityMilwaukee, WIDesign and Structural Analyses of 2D COFs as Single-Site CO2 Reduction CatalystsASCRIdreos, StratosHarvard UniversityCambridge, MAData Structural Analyses of 2D COFs as Single-Site CO2 Reduction CatalystsBESJungfleisch, M. BenjaminUniversity of OregonEugene, ORSearches for New Long-Lived Particles and Upgrade to the ATLAS Inner DetectorBESJungfleisch, M. BenjaminUniversityPleawareNewark, DEEmergent properties of magnons coupled to microwave photonsBESKatoch, JyotiCarnegie Mellon UniversityPittsburgh, PATunable Energy Landscape, Non-trivial Band Topology, and Elect	FES	Gleason, Arianna	SLAC National Accelerator Laboratory	Menlo Park, CA	Ultrafast visualization of hydrodynamic evolution: understanding void collapse at extreme high-pressure conditions
FES Hammond, Karl University of Missouri Columbia, MO Lithium–Divertor Interactions and Helium/Hydrogen Trapping in Lithiated Metals   NP Hen, Or Massachusetts Institute of Technology Cambridge, MA Study of Short-Range Correlations in Nuclei Using Electro- induced Nucleon-knockout Reactions at High Momentum- Transfer   HEP Hertel, Scott University of Massachusetts, Amherst Hadley, MA Optimization and Calibration of a 4He-based Detector for Low-Mass Dark Matter   BES Hicks (Matson), Ellen University of Rochester Rochester, NY Modeling electronic interactions and multielectron reactivity of actinide ions on metal-oxide surfaces: Synthesis, characterization, and reactivity of actinide-functionalized polyoxovanadates   BES Huang, Jier Marquette University Cambridge, MA Data Structural Analyses of 2D COFs as Single-Site CO2 Reduction Catalysts   ASCR Idreos, Stratos Harvard University Cambridge, MA Data Structure Alchemy   HEP Jeanty, Laura University Of Delaware Newark, DE Emergent properties of magnons coupled to microwave photons   BES Jungfleisch, M. Benjamin University Carnegie Mellon University Pittsburgh, PA Tunable Energy Landscape, Non-trivial Band Topology, and Electric Field Driven Phenomena in Novel Quantum Materials as Probe	HEP	Gollapinni, Sowjanya	University of Tennessee	Knoxville, TN	Development of a Laser Calibration System for the DUNE Far Detector
NPHen, OrMassachusetts Institute of TechnologyCambridge, MAStudy of Short-Range Correlations in Nuclei Using Electro- induced Nucleon-knockout Reactions at High Momentum- TransferHEPHertel, ScottUniversity of Massachusetts, AmherstHadley, MAOptimization and Calibration of a 4He-based Detector for Low-Mass Dark MatterBESHicks (Matson), EllenUniversity of RochesterRochester, NYModeling electronic interactions and multielectron reactivity of actinide ions on metal-oxide surfaces: Synthesis, characterization, and reactivity of actinide-functionalized polyoxovanadatesBESHuang, JierMarquette UniversityMilwaukee, WIDesign and Structural Analyses of 2D COFs as Single-Site CO2 Reduction CatalystsASCRIdreos, StratosHarvard UniversityCambridge, MAData Structure AlchemyHEPJeanty, LauraUniversity Of OregonEugene, ORSearches for New Long-Lived Particles and Upgrade to the ATLAS Inner DetectorBESJungfleisch, M. BenjaminUniversity Of DelawareNewark, DEEmergent properties of magnons coupled to microwave photonsBESKatoch, JyotiCarnegie Mellon UniversityPittsburgh, PATunable Energy Landscape, Non-trivial Band Topology, and Electric Field Driven Phenomena in Novel Quantum Materials as Probed by Localized Photoemission Spectroscopy	FES	Hammond, Karl	University of Missouri	Columbia, MO	Lithium–Divertor Interactions and Helium/Hydrogen Trapping in Lithiated Metals
HEPHertel, ScottUniversity of Massachusetts, AmherstHadley, MAOptimization and Calibration of a 4He-based Detector for Low-Mass Dark MatterBESHicks (Matson), EllenUniversity of RochesterRochester, NYModeling electronic interactions and multielectron reactivity of actinide ions on metal-oxide surfaces: Synthesis, characterization, and reactivity of actinide-functionalized polyoxovanadatesBESHuang, JierMarquette UniversityMilwaukee, WIDesign and Structural Analyses of 2D COFs as Single-Site CO2 Reduction CatalystsASCRIdreos, StratosHarvard UniversityCambridge, MAData Structure AlchemyHEPJeanty, LauraUniversity of OregonEugene, ORSearches for New Long-Lived Particles and Upgrade to the ATLAS Inner DetectorBESJungfleisch, M. BenjaminUniversity Of DelawareNewark, DEEmergent properties of magnons coupled to microwave photonsBESKatoch, JyotiCarnegie Mellon UniversityPittsburgh, PATunable Energy Landscape, Non-trivial Band Topology, and Electric Field Driven Phenomena in Novel Quantum Materials as Probed by Localized Photoemission Spectroscopy	NP	Hen, Or	Massachusetts Institute of Technology	Cambridge, MA	Study of Short-Range Correlations in Nuclei Using Electro- induced Nucleon-knockout Reactions at High Momentum- Transfer
BES Hicks (Matson), Ellen University of Rochester Rochester, NY Modeling electronic interactions and multielectron reactivity of actinide ions on metal-oxide surfaces: Synthesis, characterization, and reactivity of actinide-functionalized polyoxovanadates   BES Huang, Jier Marquette University Milwaukee, WI Design and Structural Analyses of 2D COFs as Single-Site CO2 Reduction Catalysts   ASCR Idreos, Stratos Harvard University Cambridge, MA Data Structure Alchemy   HEP Jeanty, Laura University of Oregon Eugene, OR Searches for New Long-Lived Particles and Upgrade to the ATLAS Inner Detector   BES Jungfleisch, M. Benjamin University Of Delaware Newark, DE Emergent properties of magnons coupled to microwave photons   BES Katoch, Jyoti Carnegie Mellon University Pittsburgh, PA Tunable Energy Landscape, Non-trivial Band Topology, and Electric Field Driven Phenomena in Novel Quantum Materials as Probed by Localized Photoemission Spectroscopy	HEP	Hertel, Scott	University of Massachusetts, Amherst	Hadley, MA	Optimization and Calibration of a 4He-based Detector for Low-Mass Dark Matter
BES Huang, Jier Marquette University Milwaukee, WI Design and Structural Analyses of 2D COFs as Single-Site CO2 Reduction Catalysts   ASCR Idreos, Stratos Harvard University Cambridge, MA Data Structure Alchemy   HEP Jeanty, Laura University of Oregon Eugene, OR Searches for New Long-Lived Particles and Upgrade to the ATLAS Inner Detector   BES Jungfleisch, M. Benjamin University Of Delaware Newark, DE Emergent properties of magnons coupled to microwave photons   BES Katoch, Jyoti Carnegie Mellon University Pittsburgh, PA Tunable Energy Landscape, Non-trivial Band Topology, and Electric Field Driven Phenomena in Novel Quantum Materials as Probed by Localized Photoemission Spectroscopy	BES	Hicks (Matson), Ellen	University of Rochester	Rochester, NY	Modeling electronic interactions and multielectron reactivity of actinide ions on metal-oxide surfaces: Synthesis, characterization, and reactivity of actinide-functionalized polyoxovanadates
ASCR Idreos, Stratos Harvard University Cambridge, MA Data Structure Alchemy   HEP Jeanty, Laura University of Oregon Eugene, OR Searches for New Long-Lived Particles and Upgrade to the ATLAS Inner Detector   BES Jungfleisch, M. Benjamin University Of Delaware Newark, DE Emergent properties of magnons coupled to microwave photons   BES Katoch, Jyoti Carnegie Mellon University Pittsburgh, PA Tunable Energy Landscape, Non-trivial Band Topology, and Electric Field Driven Phenomena in Novel Quantum Materials as Probed by Localized Photoemission Spectroscopy	BES	Huang, Jier	Marquette University	Milwaukee, WI	Design and Structural Analyses of 2D COFs as Single-Site CO2 Reduction Catalysts
HEP Jeanty, Laura University of Oregon Eugene, OR Searches for New Long-Lived Particles and Upgrade to the ATLAS Inner Detector   BES Jungfleisch, M. Benjamin University Of Delaware Newark, DE Emergent properties of magnons coupled to microwave photons   BES Katoch, Jyoti Carnegie Mellon University Pittsburgh, PA Tunable Energy Landscape, Non-trivial Band Topology, and Electric Field Driven Phenomena in Novel Quantum Materials as Probed by Localized Photoemission Spectroscopy	ASCR	Idreos, Stratos	Harvard University	Cambridge, MA	Data Structure Alchemy
BES Jungfleisch, M. Benjamin University Of Delaware Newark, DE Emergent properties of magnons coupled to microwave photons   BES Katoch, Jyoti Carnegie Mellon University Pittsburgh, PA Tunable Energy Landscape, Non-trivial Band Topology, and Electric Field Driven Phenomena in Novel Quantum Materials as Probed by Localized Photoemission Spectroscopy	HEP	Jeanty, Laura	University of Oregon	Eugene, OR	Searches for New Long-Lived Particles and Upgrade to the ATLAS Inner Detector
BES Katoch, Jyoti Carnegie Mellon University Pittsburgh, PA Tunable Energy Landscape, Non-trivial Band Topology, and Electric Field Driven Phenomena in Novel Quantum Materials as Probed by Localized Photoemission Spectroscopy	BES	Jungfleisch, M. Benjamin	University Of Delaware	Newark, DE	Emergent properties of magnons coupled to microwave photons
	BES	Katoch, Jyoti	Carnegie Mellon University	Pittsburgh, PA	Tunable Energy Landscape, Non-trivial Band Topology, and Electric Field Driven Phenomena in Novel Quantum Materials as Probed by Localized Photoemission Spectroscopy

## FY 2019 Office of Science Early Career Program

ASCR	Kim, Kibaek	Argonne National Laboratory (ANL)	Lemont, IL	Data-Driven Optimization under Uncertainty: Parallel Algorithms and Solver
HEP	Krause, Elisabeth	University of Arizona	Tucson, AZ	Joint analyses of lensing, clustering, and galaxy clusters with
BER	Larsen, Isaac	University of Massachusetts, Amherst	Amherst, MA	Abiotic and biotic controls on chemical weathering rates and
BES	Limmer, David	University of California, Berkeley	Berkeley, CA	Understanding and controlling photoexcited molecules in
BES	Lindsay, Lucas	Oak Ridge National Laboratory (ORNL)	Oak Ridge, TN	complex environments Elucidating the Nature of Chiral and Topological Phonons in
BES	Lubner, Cara	National Renewable Energy Laboratory (NREL)	Golden, CO	Materials for Energy Technologies Elucidating the Mechanistic Determinants of Flavin-Based
ASCR		Oak Bidge National Laboratory (ODNU)	Oak Bidgo, TN	Electron Bifurcation
AJCK	Lukens, joe		Oak Nuge, Th	Networking
HEP	Machado, Pedro Accioly Nogueira	Fermi National Accelerator Laboratory (FNAL)	Batavia, IL	The next revolution in neutrino physics
ASCR	Manucharyan, Vladimir	University of Maryland	College Park, MD	Realization of a Quantum Slide Rule for 1+1 Dimensional Quantum Field Theories Using Josephson Superconducting Circuits
BES	Maxson, Jared	Cornell University	Ithaca, NY	Control of Bright Electron Beams at Small Spatiotemporal Scales for Probing Materials Far from Equilibrium
FES	McBride, Ryan	University of Michigan	Ann Arbor, MI	The Physics of Micro-Pinches
BER	Michener, Josh	Oak Ridge National Laboratory (ORNL)	Oak Ridge, TN	Systems metabolic engineering of Novosphingobium aromaticiyorans for lignin valorization
ASCR	Mohror, Kathryn	Lawrence Livermore National Laboratory (LLNL)	Livermore, CA	I/O Workload Characterization for Performance and
NP	Palczewski, Ari	Thomas Jefferson National Accelerator Facility	Newport News, VA	Developing the surface engineering basis for next-generation
BES	Ramshaw, Brad	Cornell University	Ithaca, NY	Ultrasonic Determination of Electron Viscosity and
ASCR	Rubio Gonzalez, Cindy	University of California, Davis	Davis, CA	Hydrodynamics in Metals Towards Scalable Precision Tuning of Numerical Software
BES	Salamat, Ashkan	University of Nevada, Las Vegas	Las Vegas, NV	The synthesis of metal superhydrides through extreme
	,			temperature/pressure conditions: towards room
NP	Saldanha, Richard	Pacific Northwest National Laboratory (PNNL)	Richland, WA	Enhancing the Discovery Potential of the nEXO Neutrinoless
BER	Salvachua Rodriguez, Davinia	National Renewable Energy Laboratory (NREL)	Golden, CO	Double Beta Decay Experiment Elucidating Aromatic Catabolic Pathways in White-Rot Fungi
ASCR	Schuman, Catherine	Oak Ridge National Laboratory (ORNL)	Oak Ridge, TN	during Lignin Decay Learning to Learn: Designing Novel Neuromorphic Algorithms
ASCD	Chielde Mishael		Poltimore MD	with Machine Learning
ASCR	Shields, Michael	Johns Hopkins University	Baltimore, MD	quantification in complex multi-scale stochastic systems
BER	Solomon, Kevin	Purdue University	West Lafayette, IN	Genetic tools to optimize lignocellulose conversion in anaerobic fungi and interrogate their genomes
HEP	Sorensen, Peter	Lawrence Berkeley National Laboratory (LBNL)	Berkeley, CA	Tagging radon daughter backgrounds in a crystalline xenon TPC: a solid future for the LZ dark matter search experiment
BER	Stegen, James	Pacific Northwest National Laboratory (PNNL)	Richland, WA	Multi-Watershed Perturbation-Response Traits Derived
FES	Stoltzfus-Dueck, Timothy	Princeton Plasma Physics Laboratory (PPPL)	Princeton, NJ	Development and Testing of Reduced Models of the Edge
FES	Thimsen, Elijah	Washington University	St. Louis, MO	Structure of Plasma-Water Interface
BES	Thompson, Jeffrey	Princeton University	Princeton, NJ	Coherent control of strongly interacting spins in the solid-
BES	Tonks, lan	University of Minnesota	Minneapolis, MN	Catalytic Alkene Hydroesterification: New Tools for Polyester Synthesis and Beyond
HEP	Tran, Nhan	Fermi National Accelerator Laboratory (FNAL)	Batavia, IL	Deep learning acceleration of the boosted Higgs program and
BES	Uysal, Ahmet	Argonne National Laboratory (ANL)	Lemont, IL	Mechanistic Understanding of Heavy Ion Adsorption, Chemistry, and Separations at Graphene Based 2D Materials
BER	Varadharajan, Charuleka	Lawrence Berkeley National Laboratory (LBNL)	Berkeley, CA	Interfaces Investigating the Impacts of Streamflow Disturbances on
BES	Vinyard, David	Louisiana State University and A&M College	Baton Rouge, LA	Water Quality using a Data-Driven Framework Assembly and Repair of the Photosystem II Reaction Center
BES	Wang, Bin	University of Oklahoma	Norman, OK	Catalysis Driven by Confined Hot Carriers at the
BES	Wang, Yangyang	Oak Ridge National Laboratory (ORNL)	Oak Ridge, TN	Liquid/Metal/Zeolite Interface Fingerprinting Macromolecular Flow and Deformation with
DEC	Watzman Sarah	University of Cincinnet	Cincinnati OLI	Neutrons
BED	vvatzillall, Sdfdff			Thermoelectric Transport

BES	Wharry, Janelle	Purdue University	West Lafayette, IN	Irradiation Tailoring of Deformation-Induced Phase
				Transformation
HEP	Xu, Jingke	Lawrence Livermore National Laboratory (LLNL)	Livermore, CA	Pursuing the ultimate power of xenon dark matter detectors
HEP	Xu, Xingchen	Fermi National Accelerator Laboratory (FNAL)	Batavia, IL	Development of next-generation Nb3Sn superconductors for
	, 3		,	energy-frontier circular colliders
BES	Yan, Qimin	Temple University	Philadelphia, PA	Synthesis of motif and symmetry for accelerated learning,
				discovery, and design of electronic structures for energy
				conversion applications
BES	Zakutavev. Andriv	National Renewable Energy Laboratory (NREL)	Golden. CO	Kinetic Synthesis of Metastable Nitrides
-	, ,		,	
BES	Zeljkovic, Ilija	Boston College	Chestnut Hill, MA	Atomic-scale Imaging of Magnetic and Electronic Orders in
		-		Complex Oxides
NP	Zhang, Jiehang	New York University	New York, NY	Exploring Quantum Many-body Physics with a Trapped Ion
				Quantum Information Processor