<table>
<thead>
<tr>
<th>Selectee</th>
<th>Institution</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erdelyi, Bela</td>
<td>Northern Illinois University, DeKalb, IL 60115-2864</td>
<td>Nonlinear Dynamics of Integrable Hamiltonian Systems for Novel Particle Accelerators in High Energy Physics</td>
</tr>
<tr>
<td>Link, Jonathan</td>
<td>Virginia Polytechnic Institute and State University, Blacksburg, VA 24060-3580</td>
<td>Studies of Fundamental Neutrino Properties at the Intensity Frontier</td>
</tr>
<tr>
<td>Rosenzweig, James</td>
<td>Regents of the University of California, Los Angeles, Los Angeles, CA 90095-1406</td>
<td>Ultra-high Gradient, Cryogenic RF Acceleration for Linear Collider Applications</td>
</tr>
<tr>
<td>Cochran, James</td>
<td>Iowa State University of Science and Technology, Ames, IA 50011-2207</td>
<td>Investigations in Experimental High Energy Physics</td>
</tr>
<tr>
<td>Martinec, Emil</td>
<td>The University of Chicago, Chicago, IL 60637-5418</td>
<td>Theoretical High Energy Physics Research at the University of Chicago - 2019-2022</td>
</tr>
<tr>
<td>Asaadi, Jonathan</td>
<td>The University of Texas at Arlington, Arlington, TX 76019-0145</td>
<td>QPix Technology: Research and Development towards kiloTon scale pixelated LArTPC</td>
</tr>
<tr>
<td>Jastram, Andrew</td>
<td>Texas A&amp;M University, College Station, TX 77845-4321</td>
<td>Active Inner Veto for Improved SuperCDMS SNOLAB Dark Matter Search Sensitivity</td>
</tr>
<tr>
<td>Sobel, Henry</td>
<td>Regents of the University of California, Irvine, Irvine, CA 92697-7600</td>
<td>A Research Program in Elementary Particle Physics</td>
</tr>
<tr>
<td>Hadley, Nick</td>
<td>University of Maryland, College Park, MD 20742-5141</td>
<td>HIGH ENERGY ACCELERATOR and COSMIC RAY USER GROUP at the UNIVERSITY of MARYLAND</td>
</tr>
<tr>
<td>White, Christopher</td>
<td>Illinois Institute of Technology, Chicago, IL 60616-3717</td>
<td>Experimental Neutrino Physics Research at Illinois Tech</td>
</tr>
<tr>
<td>Larbalestier, David</td>
<td>Florida State University, Tallahassee, FL 32306-4166</td>
<td>The Underlying Science of Round Wire Bi-2212</td>
</tr>
<tr>
<td>Milchberg, Howard</td>
<td>University of Maryland, College Park, MD 20742-5141</td>
<td>Application of Axially Modulated Plasma Structures to Advanced High Energy Accelerators</td>
</tr>
<tr>
<td>Mattingly, David</td>
<td>University of New Hampshire, Durham, NH 03824-3585</td>
<td>Theoretical High Energy Physics at the University of New Hampshire</td>
</tr>
<tr>
<td>Frisch, Henry</td>
<td>The University of Chicago, Chicago, IL 60637-5418</td>
<td>Precision Time-of-Flight at the Fermilab Testbeam Facility</td>
</tr>
<tr>
<td>Grandi, Luca</td>
<td>The University of Chicago, Chicago, IL 60637-5418</td>
<td>Development of Nanocomposite Coatings for Future Large-Scale Time Projection Chambers</td>
</tr>
<tr>
<td>Litvinenko, Vladimir</td>
<td>The Research Foundation for SUNY Stony Brook University, Stony Brook, NY 11794-3362</td>
<td>CO2-laser-driven GeV wakefield accelerators</td>
</tr>
<tr>
<td>Arnold, Peter</td>
<td>The Rector and Visitors of the University of Virginia, Charlottesville, VA 22904-4195</td>
<td>The University of Virginia, Theoretical High Energy Physics</td>
</tr>
<tr>
<td>Spentzouris, Linda</td>
<td>Illinois Institute of Technology, Chicago, IL 60616-3717</td>
<td>Multidisciplinary development of SRF and photocathode technology</td>
</tr>
<tr>
<td>Thomas, Scott</td>
<td>Rutgers, The State University of New Jersey, Piscataway, NJ 08854-3925</td>
<td>Research in Theoretical High Energy Physics</td>
</tr>
<tr>
<td>Roberts, Bradley</td>
<td>Trustees of Boston University, Boston, MA 02215-1300</td>
<td>Precision Muon Physics at Fermilab</td>
</tr>
<tr>
<td>Velasco, Mayda</td>
<td>Northwestern University, Evanston, IL 60201-3149</td>
<td>Research in the Energy, Cosmic and Intensity Frontiers and Theoretical Physics at Northwestern University</td>
</tr>
<tr>
<td>Wurtele, Jonathan</td>
<td>The Regents of University of California, Berkeley, CA 94704-5940</td>
<td>Theory and Modeling of Optical Stochastic Cooling for the IOTA Experiment</td>
</tr>
</tbody>
</table>
## FY 2019 Research Opportunities in High Energy Physics - List of Awards

<table>
<thead>
<tr>
<th>Selectee</th>
<th>Institution</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schmaltz, Martin</td>
<td>Trustees of Boston University, Boston, MA 02215-1300</td>
<td>Topics in Theoretical Particle Physics</td>
</tr>
<tr>
<td>Szydagis, Matthew</td>
<td>The Research Foundation of SUNY, University at Albany, Albany, NY 12222-0100</td>
<td>Simulations, Analysis, and Radon Mitigation for the LZ Dark Matter Search</td>
</tr>
<tr>
<td>Soderberg, Mitchell</td>
<td>Syracuse University, Syracuse, NY 13244-1200</td>
<td>Development of Improved Noble Liquid Purity Measurements</td>
</tr>
<tr>
<td>Nachman, Jane</td>
<td>University of Iowa, Iowa City, IA 52242-1320</td>
<td>High Energy Experimental and Theoretical Physics Research at the University of Iowa</td>
</tr>
<tr>
<td>Sciolla, Gabriella</td>
<td>Brandeis University, Waltham, MA 02453-2728</td>
<td>Particle Physics and Cosmology Research at Brandeis University</td>
</tr>
<tr>
<td>Bean, Rachel</td>
<td>Cornell University, Ithaca, NY 14850-2820</td>
<td>Maximizing LSST and DESI's impact on dark sector and inflationary physics.</td>
</tr>
<tr>
<td>Akchurin, Nural</td>
<td>Texas Tech University, Lubbock, TX 79409-1035</td>
<td>Experimental Particle Physics Research at Texas Tech University</td>
</tr>
<tr>
<td>Stroynowski, Ryszard</td>
<td>Southern Methodist University, Dallas, TX 75275-0240</td>
<td>Research in High Energy Physics at Southern Methodist University</td>
</tr>
<tr>
<td>Sumption, Michael</td>
<td>The Ohio State University, Columbus, OH 43210-1016</td>
<td>Conductors, Cables, and Magnets for High Energy Physics: Transport, Magnetization, Strain, and Modelling</td>
</tr>
<tr>
<td>Andonian, Gerard</td>
<td>Regents of the University of California, Los Angeles, CA 90095-1406</td>
<td>A High Transformer Ratio Plasma Wakefield Accelerator Experiment at the AWA</td>
</tr>
<tr>
<td>Butler, John</td>
<td>Trustees of Boston University, Boston, MA 02215-1300</td>
<td>LHC Research at Boston University</td>
</tr>
<tr>
<td>Rusack, Roger</td>
<td>Regents of the University of Minnesota, Minneapolis, MN 55455-2070</td>
<td>Very High Precision Clock Distribution Demonstrator System</td>
</tr>
<tr>
<td>Bechtol, Keith</td>
<td>Board of Regents of the University of Wisconsin System, operating as University of Wisconsin-Madison, Madison, WI 53715-1218</td>
<td>Science Validation for Dark Energy Research with Optical Imaging Surveys</td>
</tr>
<tr>
<td>Brod, Joachim</td>
<td>University of Cincinnati, Cincinnati, OH 45221-0222</td>
<td>The Origin of Matter</td>
</tr>
<tr>
<td>Caldwell, Robert</td>
<td>Trustees of Dartmouth College, Hanover, NH 03755-1421</td>
<td>Dartmouth Theory Group: The Origin and Nature of the Universe</td>
</tr>
<tr>
<td>Antonsen, Thomas</td>
<td>University of Maryland, College Park, MD 20742-5141</td>
<td>Fundamental Beam Physics for Advanced Accelerators</td>
</tr>
<tr>
<td>Dawson, Kyle</td>
<td>University of Utah, Salt Lake City, UT 84102-0000</td>
<td>Exploring Dark Energy at All Scales with eBOSS and DESI</td>
</tr>
<tr>
<td>Walter, Christopher</td>
<td>Duke University, Durham, NC 27705-4010</td>
<td>Research in High Energy Physics at Duke University</td>
</tr>
<tr>
<td>Moustakas, John</td>
<td>Siena College, Loudonville, NY 12211-1462</td>
<td>Improving Cosmological Precision by Mitigating DESI Redshift Survey Systematics</td>
</tr>
<tr>
<td>Adams, Todd</td>
<td>Florida State University, Tallahassee, FL 32306-4166</td>
<td>Florida State University High Energy Physics</td>
</tr>
<tr>
<td>Mahn, Kendall</td>
<td>Michigan State University, East Lansing, MI 48824-2601</td>
<td>Improved neutrino oscillation measurements using multiple neutrino energy spectra</td>
</tr>
</tbody>
</table>
### FY 2019 Research Opportunities in High Energy Physics - List of Awards

<table>
<thead>
<tr>
<th>Selectee</th>
<th>Institution</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gurevich, Alexander</td>
<td>Old Dominion University Research Foundation, Norfolk, VA 23508-2561</td>
<td>Investigation of new superconducting materials for the next generation high-gradient RF cavities for particle accelerators</td>
</tr>
<tr>
<td>Hohlmann, Marcus</td>
<td>Florida Institute of Technology, Melbourne, FL 32901-6975</td>
<td>Experimental High Energy Physics Research</td>
</tr>
<tr>
<td>Berz, Martin</td>
<td>Michigan State University, East Lansing, MI 48824-2601</td>
<td>Advanced Nonlinear Particle Beam Dynamics: Muon g-2, EDM Searches, and Workforce Training</td>
</tr>
<tr>
<td>Dunne, Gerald</td>
<td>University of Connecticut, Storrs, CT 06269-1133</td>
<td>Theoretical High Energy and Particle Physics</td>
</tr>
<tr>
<td>Roiban, Radu</td>
<td>The Pennsylvania State University, University Park, PA 16802-7000</td>
<td>Theoretical Studies in Elementary Particle Physics</td>
</tr>
<tr>
<td>Poland, David</td>
<td>Yale University, New Haven, CT 06520-8327</td>
<td>New Approaches to Strong Dynamics</td>
</tr>
<tr>
<td>Newman, Jeffrey</td>
<td>University of Pittsburgh, Pittsburgh, PA 15213-2303</td>
<td>Enabling Dark Energy Measurements from DESI and LSST</td>
</tr>
<tr>
<td>Landsberg, Greg</td>
<td>Brown University, Providence, RI 02912-2912</td>
<td>Fundamental Problems in High-Energy Physics, Astroparticle Physics, and Cosmology</td>
</tr>
<tr>
<td>Joshi, Chan</td>
<td>Regents of the University of California, Los Angeles, Los Angeles, CA 90095-1406</td>
<td>Experimental, theoretical and simulations studies of the role of plasmas in future accelerators.</td>
</tr>
<tr>
<td>Catterall, Simon</td>
<td>Syracuse University, Syracuse, NY 13244-1200</td>
<td>Theoretical Particle Physics and Cosmology</td>
</tr>
<tr>
<td>Sikivie, Pierre</td>
<td>University of Florida, Gainesville, FL 32611-5500</td>
<td>Theoretical inquiries beyond the standard model and experimental search for axion dark matter</td>
</tr>
<tr>
<td>Lunin, Oleg</td>
<td>The Research Foundation of SUNY, University at Albany, Albany, NY 12222-0100</td>
<td>Integrability and Symmetries of Classical Geometries</td>
</tr>
<tr>
<td>Spanier, Stefan</td>
<td>The University of Tennessee, Knoxville, TN 37996-1529</td>
<td>Elementary Particle Interactions with CMS at LHC</td>
</tr>
<tr>
<td>McFarland, Kevin</td>
<td>University of Rochester, Rochester, NY 14627-0140</td>
<td>Experimental Studies of Elementary Particles and Fields</td>
</tr>
<tr>
<td>Greensite, Jeff</td>
<td>San Francisco State University, San Francisco, CA 94132-1722</td>
<td>Research in Theoretical High Energy Physics</td>
</tr>
<tr>
<td>Temkin, Richard</td>
<td>Massachusetts Institute of Technology, Cambridge, MA 02139-4307</td>
<td>High Frequency High Gradient Accelerator Research</td>
</tr>
<tr>
<td>Guo, Wei</td>
<td>Florida State University, Tallahassee, FL 32306-4166</td>
<td>Liquid Helium Fluid Dynamics Studies</td>
</tr>
<tr>
<td>Shafi, Qaisar</td>
<td>University Of Delaware, Newark, DE 19716-0099</td>
<td>Particle Theory, Particle Astrophysics and Cosmology</td>
</tr>
<tr>
<td>Giedt, Joel</td>
<td>Rensselaer Polytechnic Institute, Troy, NY 12180-3522</td>
<td>Lattice Field Theory Beyond the Standard Model</td>
</tr>
<tr>
<td>Johnson, Clifford</td>
<td>UNIVERSITY OF SOUTHERN CALIFORNIA, Los Angeles, CA 90089-0701</td>
<td>Gravity, Geometry and Field Theory in Fundamental Physics</td>
</tr>
<tr>
<td>Seiberg, Nathan</td>
<td>Institute for Advanced Study, Princeton, NJ 08540-8540</td>
<td>Problems in Theoretical Physics</td>
</tr>
<tr>
<td>Seidel, Sally</td>
<td>University of New Mexico, Albuquerque, NM 87131-0001</td>
<td>Collider Physics Instrumentation</td>
</tr>
<tr>
<td>Aurisano, Adam</td>
<td>University of Cincinnati, Cincinnati, OH 45221-0222</td>
<td>Searches for New Physics in Neutrino Oscillations at the MINOS+, NOvA, and DUNE Experiments.</td>
</tr>
<tr>
<td>Selectee</td>
<td>Institution</td>
<td>Title</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Johns, Kenneth</td>
<td>Arizona Board of Regents, The University of Arizona, Tucson, AZ 85721-0158</td>
<td>University of Arizona High Energy Physics Program</td>
</tr>
<tr>
<td>Cousins, Robert</td>
<td>Regents of the University of California, Los Angeles, Los Angeles, CA 90095-1406</td>
<td>Experimental and Theoretical High Energy Physics Research at UCLA</td>
</tr>
<tr>
<td>Mariani, Camillo</td>
<td>Virginia Polytechnic Institute and State University, Blacksburg, VA 24060-3580</td>
<td>Virginia Tech Center for Neutrino Physics HEP Umbrella</td>
</tr>
<tr>
<td>Browder, Thomas</td>
<td>University of Hawaii, Honolulu, HI 96822-2303</td>
<td>Research in High Energy Physics</td>
</tr>
<tr>
<td>Campbell, Myron</td>
<td>Regents of the University of Michigan, Ann Arbor, MI 48109-1274</td>
<td>Search for Rare Processes: Mu2e and KOTO</td>
</tr>
<tr>
<td>Lewis, Ian</td>
<td>University of Kansas Center for Research, Inc., Lawrence, KS 66045-7568</td>
<td>New Physics Searches in Standard Model Processes at the LHC</td>
</tr>
<tr>
<td>Sehgal, Neelima</td>
<td>The Research Foundation for SUNY Stony Brook University, Stony Brook, NY 11794-3362</td>
<td>Mapping Dark Matter on Small Scales with the Cosmic Microwave Background</td>
</tr>
<tr>
<td>Petti, Roberto</td>
<td>University of South Carolina, Columbia, SC 29208-0001</td>
<td>Neutrino Physics at the Intensity Frontier</td>
</tr>
<tr>
<td>Efremenko, Yuri</td>
<td>The University of Tennessee, Knoxville, TN 37996-1529</td>
<td>Search for a New Physics via Coherent Elastic Neutrino Nucleus Scattering at the SNS</td>
</tr>
</tbody>
</table>