DNP10-2010-000114

Abstract for an Invited Paper
for the DNP10 Meeting of
the American Physical Society

What nuclear physics tells us about physics beyond the nucleus

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One of the great intellectual strengths of nuclear physics is the breadth of phenomena that it encompasses. This diversity promotes the exchange of new ideas and techniques within our field, while also extending its impact to related disciplines such as high energy physics, astrophysics, and cosmology. Nuclear physicists, through the study of fundamental symmetries, are addressing the origin of the matter-antimatter asymmetry of the universe, the fundamental nature of the neutrino, and the existence of supersymmetry and dark matter. In the three years since our last long-range plan was developed, we have explored the interior of the sun and the earth with neutrinos, developed new theoretical tools to guide us and to interpret our experiments, and greatly advanced our ambitious plans to search for new symmetries and new symmetry-violating processes. We describe here the status of our program and the prospects for further progress in the next decade.