

***Ab initio* nuclear structure - recent developments**

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The vision of solving the nuclear many-body problem with fundamental interactions tied to QCD via Chiral perturbation theory appears to be gaining credibility. The goals are to preserve the predictive power of the underlying theory, to test fundamental symmetries with the nucleus as laboratory and to develop new understandings of the full range of complex nuclear phenomena. Advances in theoretical frameworks (renormalization and many-body methods) as well as in computational resources (new algorithms and leadership-class parallel computers) signal a new generation of theory simulations that will yield valuable insights into origins of nuclear shell structure, collective phenomena and complex reaction dynamics. I will outline some recent achievements and present ambitious consensus plans along with their challenges for a coming decade of research that will strengthen the links between nuclear theory and nuclear experiment, between nuclear physics and astrophysics, and between nuclear physics and nuclear energy applications.