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Future directions for nuclear theory DAVID KAPLAN, Institute for Nuclear Theory

Nuclear theory has reinvented itself over the past decade, creating new qualitative paradigms for matter under extreme conditions, while developing increasingly quantitative methods for determining the structure and interactions of hadrons in few- and many-body systems. The renaissance looks far from over, and with the advent of peta-scale computing, there will be opportunities for theorists to solve open questions in nuclear physics of ever greater complexity. I discuss some directions where progress in the near future looks particularly promising.