

## **Trends and Prospects in Nuclear and Hadron Physics: a straight or winding road?**

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Quantitative calculations of the properties of hadrons and nuclei, with assessed uncertainties, have emerged as competitive with experimental measurements in a number of major cases. We may well be entering an era where theoretical predictions are critical for experimental progress. Fundamental elements and new technology that pave these roads share much in common. Indeed, cross-fertilization between the fields of relativistic hadronic structure and non-relativistic nuclear structure is readily apparent. Non-perturbative renormalization methods such as Similarity Renormalization Group and Okubo-Lee-Suzuki schemes as well as many-body methods such as Coupled Cluster, Configuration Interaction and Lattice Simulation methods as are now employed and advancing in both major areas of physics. New algorithms to apply these approaches on supercomputers are shared among these areas of physics. The roads to success have intertwined with each community taking the lead at various times in the recent past. I will sketch these fascinating paths and comment on a number of symbiotic relationships.