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Lecture Notes of the Workshop Held at Gull Lake, Michigan, August 27 – September 7, 1979

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The papers contained in this volume review the present status of nuclear structure physics. Nuclear theory's most important tool, the shell model representation, is described in contributions by Kurath, Bertsch and Faessler. Iachello's paper describes the use of group theory to simplify the description of complex spectra, an application that has developed into a high art. For spectral regions beyond the grasp of either the shell model or group theory, statistical considerations have an applicability that is only recently fully understood, as French explains. Brown's lectures cover the foundations of nuclear theory in the nonrelativistic reduction of nucleon-nucleon dynamics to derive an effective Hamiltonian. An appendix by Bertsch, Zamick and Mekjian brings to light numerous open problems.

Volume 120

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Proceedings of the Meeting Held at the University of Lecce June 20–23, 1979

Editors: M. Botti, F. Pempinelli, G. Soliani

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