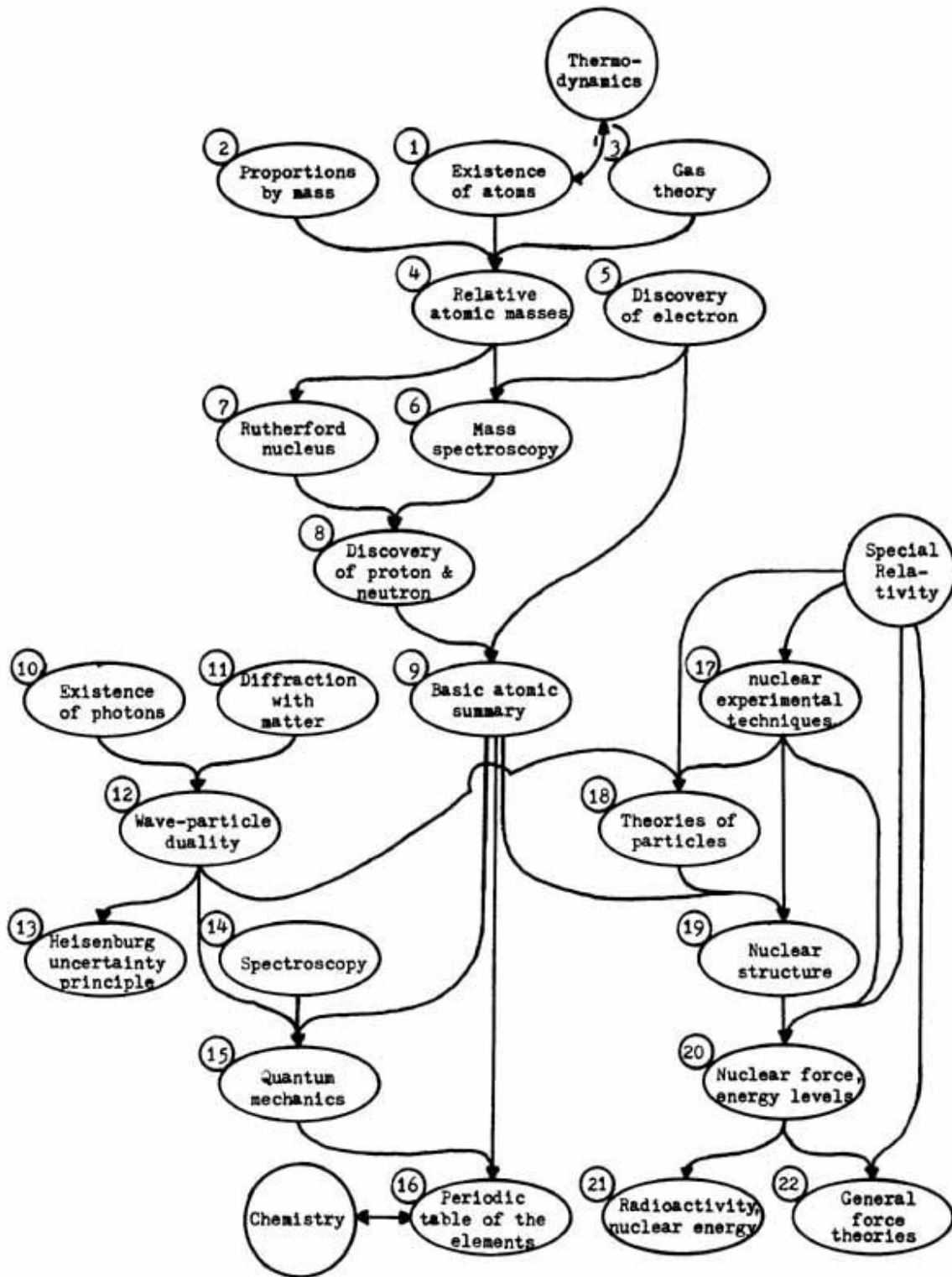


Chart 4 - Atomic and Sub-Atomic Physics



From Above the Web: A New Look at Physics and its Extensions

From the Introduction by Lorne Whitehead:

The nature of this book is summed up in its title. It represents a new approach to the study of physics and the subjects which build upon it. These realms of human thought involve a complex web of connecting ideas, and it is our purpose to discuss the various thoughts and concepts in the context of their web of interconnections. We are providing an overview to the development of thought, in order to display the reasoning behind the results which the student must often memorize. In so doing, it is our hope to present a fine, natural beauty, as well as an appreciation of the power of human thought.

On the practical side, we are limited to the medium of pen and ink, which lends itself well only to simple linear thought. Our solution has been to provide a reference chart for each of our subjects. These charts show the important interrelationships of the main ideas in the subjects. They convey the arrangement of important ideas in the simplest possible manner, but are obviously devoid of detailed explanation. Such explanation, of course, is the purpose of the text itself. Consisting of a set of essays made in direct reference to the ideas in the charts, the written word provides the information necessary to fully comprehend the thoughtflow of the subject. Having read the text, and using the charts as a memory aid, we believe the student will be in a position to answer the ever present question, "Why?".

The format of this book is such that it can be used by a variety of people in many different ways. While on some levels it might function as a complete textbook, it is intended primarily as an education supplement. A range of students from senior high school to university graduate-level will find sections of the book interesting and informative. The detailed bibliographies and thought-charts also make the book a useful reference tool. In short, this book is of use to virtually any interested student who wishes to expand or clarify his understanding of nature.

Excerpt from the Introduction to *From Above the Web: A New Look at Physics and its Extensions*, first draft manuscript, copyright 1975 by the authors: Stephen Arthur, James Atkins, Mark Termes, and Lorne Whitehead. Funded by an OFY grant. Original idea and project proposal by Stephen Arthur. **See flowchart example.** Dr. Whitehead is Vice-President Academic and Provost of the University of British Columbia as of 2004. He is the founder of TIR Systems and holds a research chair in the UBC Department of Physics.