

12. Review of K. Simonyi: A Cultural History of Physics (Amazon)

The appearance of this book by Karoly Simonyi is a major publishing event. Originally published in Hungarian in 1978 it has appeared in five Hungarian and three German editions. This first English edition (translated by David Kramer) now appears through the initiative of Alice and Klaus Peters of A K Peters and the author's son Charles Simonyi who writes an engaging Foreword to the book. This new edition ends with an Epilogue by E.Witten, entitled "Looking ahead in Physics".

Starting with an introductory essay on the history of physics and its relevance to our lives today the book traces the development of physics from antiquity to the present. The beginning of science with focus on Egypt and Mesopotamia is followed by a very detailed account of the classical Hellenistic period, explaining works of the Pythagoreans and Plato, Socrates, Aristoteles and Archimedes. Their work is described in considerable detail through explicit proofs, revealing figures and historical quotations. The next chapter relates how the Hellenistic period was followed by a dormant period in science which stretched into the Renaissance. Then in Chapter 3 the book describes the work of Brahe, Kepler, Galileo, Copernicus, Descartes, Fermat, Huygens, leading to the Newtonian world view. Chapter 4 is entitled "The Completion of Classical Physics" followed by the last chapter "The Physics of the Twentieth Century".

While the text is devoted to the history of physics, it is complemented by very detailed and clear illustrations enabling the reader to acquire real understanding of the arguments. Thus in addition to its historical character, the book can serve as a complement to a textbook. Often the text is supplied with quotations from original sources giving some insight into the pioneering efforts of the originators. Many magnificent drawings and photographs are included. The book brings out the great subject of Physics and its history in a rich and colorful fashion.

The book fills 600 large pages and virtually every page contains clarifying figures, diagrams, illustrations, photographs and historical asides. It is also gratifying that in spite of the vibrant production the price of the book has been kept very reasonable.