

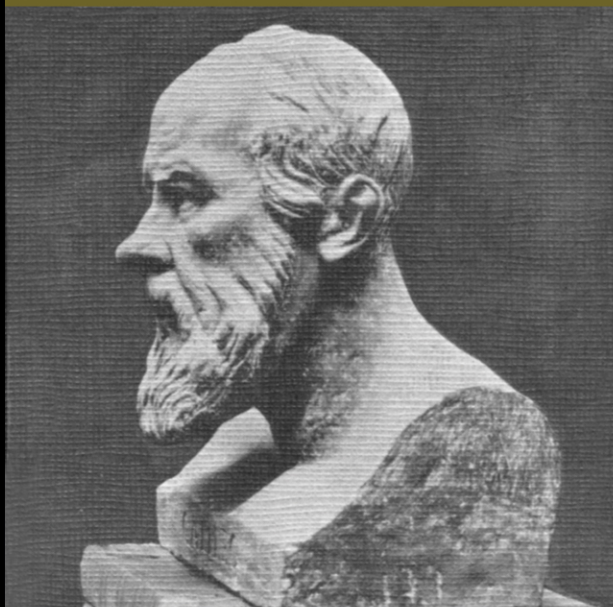
Selected Readings in Physics

MEN OF PHYSICS:

Galileo Galilei, his life and his works

RAYMOND J. SEEGER

National Science Foundation



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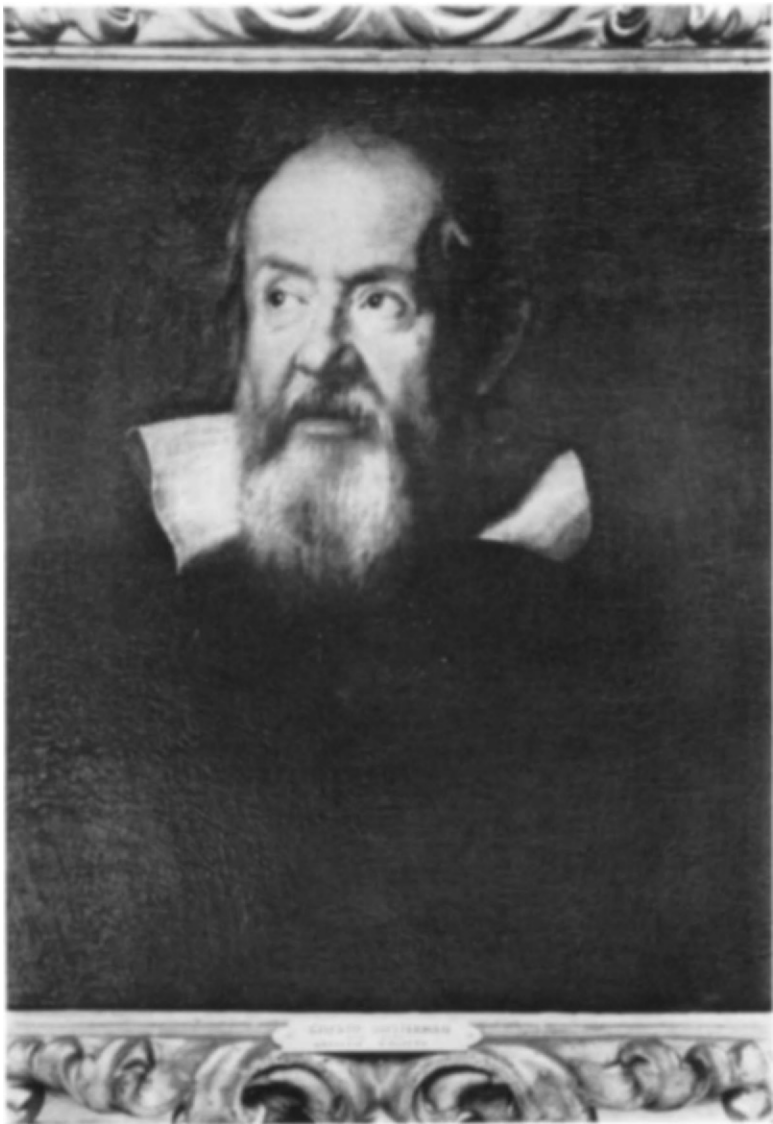
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Men of Physics

Galileo Galilei, his life and his works

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Portrait of Galileo by Süsterman, Uffizi Gallery, Florence

Men of Physics

Galileo Galilei, his life and his works

BY

RAYMOND J. SEEGER

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For
Muriel Jane and John Mark

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PREFACE

THE distinctive feature of modern Western culture has been the growing social importance of science and technology. No one, however, can hope to comprehend the historical development of science without taking into account the role of Galileo Galilei. He lived during the critical transition period between the medieval and modern eras. He pioneered the path to our own understanding of physical phenomena. He grappled with complex problems that still face us; his methodology and ideas are embedded in the very foundations of physics today. As we examine directly the thinking inherent in his works, from the vantage point of the present, we encounter new light on old experiences. The tacit assumptions of crystallized science today stand out vividly in the fumbling procedures of its amorphous beginnings. They need to be re-evaluated to give us a sense of direction for their future use.

Galileo began his career in academic institutions and concluded it in the service of a powerful city-state. His prominent position afforded many contacts with intellectuals in the universities and in the Church. His radical approach and dominating personality led inevitably to friction with both the philosophers and the theologians of his day. The Church trial of Galileo is one of the celebrated cases of history. Despite his social problems, Galileo was sincerely a religious man of science.

Galileo, with his broad interests in art and music and with his skill as a popular writer, was a typical renaissance man—with an interest also in science. His integrated life, therefore, is well worth studying in view of our current concern about the fragmentation of the culture of our own time.

*Thanksgiving Day 1965.
Washington, D.C.*

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Part 1. HIS LIFE