

S100: Science: a foundation course

S100/01: Science Course Unit 1: Introduction

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Clip transcript: Comparing the modern and historical research scientist

Michael Pentz:

Even in the most modern laboratories, like CERN, equipped with the most complex and costly apparatus and with instruments of great precision and refinement, the research scientist is in essentially the same situation as Galileo was, or for that matter, as you will be when you do some of the home experiments in this course. He is working in the unknown and near the limits of his instrumentation. He has to design his experiments so as to be able to test some hypothesis. He does so in the technological context of his time. Technology sets the limit on what he can do - sometimes even sets the limit on what he can think of doing and he may be confronted with some unknown phenomenon that drastically affects his experiments – as Galileo was, with rotational energy.