

DISCORSI
E
DIMOSTRAZIONI
MATEMATICHE,
intorno à due nuoue scienze

Attenenti alla
MECANICA & I MOVIMENTI LOCALI,
del Signor

GALILEO GALILEI LINCEO,
Filosofo e Matematico primario del Serenissimo
Grand Duca di Toscana.

Con vna Appendice del centro di gravità d'alcuni Solidi.



IN LEIDA,
Appresso gli Elsevirii. M. D. C. XXXVIII.

Table of the Principal Matters That Are Treated in the Present Work¹

<p style="text-align: right; margin-right: 20px;">I</p> <p>First new science, concerning the resistance of solid bodies to separation.</p>	<p><i>First Day,</i></p>	<p><i>page 11</i></p>
<p style="text-align: right; margin-right: 20px;">II</p> <p>What may be the cause of cohesion.</p>	<p><i>Second Day,</i></p>	<p><i>page 109</i></p>
<p style="text-align: right; margin-right: 20px;">III</p> <p>Second new science, of local motions.</p> <p style="padding-left: 20px;">Of uniform motions, <i>page 148</i></p> <p style="padding-left: 20px;">Of naturally accelerated motion, <i>page 153</i></p>	<p><i>Third Day,</i></p>	<p><i>page 147</i></p>
<p style="text-align: right; margin-right: 20px;">IV</p> <p>Of violent motion, or of projectiles.</p>	<p><i>Fourth Day,</i></p>	<p><i>page 217</i></p>
<p style="text-align: right; margin-right: 20px;">V</p> <p>Appendix of some propositions and demonstrations concerning the center of gravity of solids.</p>		<p><i>page 261</i></p>
<p style="text-align: right; margin-right: 20px;">[VI]</p> <p>[Of the force of percussion.²</p>	<p><i>Added Day,</i></p>	<p><i>page 281]</i></p>

1. This table of contents reversing the essential content of the two first days, was prepared by the Elzevirs.

2. Sometimes called the Sixth Day, this incomplete dialogue was first published in 1718, as part of the second collected edition of Galileo's works. A so-called Fifth Day, first published by Vincenzo Viviani (1622-1703) in 1674, does not belong to this book.

“Natural philosophy” – from Scholastic philosophy

vs.

“Scientia” (Lat.), “Scienze” (It.) – secure knowledge

“Theory”: *An inter-connected system of mathematical propositions, linking measurable parameters to one another and to observable phenomena, from which, with appropriate additional empirical information (e.g. values of parameters), one can derive answers to a wide range of questions, including predictive and counterfactual questions.*

Examples: Ptolemaic theories of the Sun, the Moon, Mercury, Venus-Mars-Jupiter-Saturn; Copernican theories of the same; Keplerian theories of the six planets and the Moon