







DIALOGALILEI LINCEO

MATEMATICO SOPRAORDINARIO

DELLO STVDIO DI PISA.

E Filosofo, e Matematico primario del

SEREN1SSIMO

GR.DVCA DI TOSCANA.

Doue ne i congressi di quattro giornate si discorre fopra i due

MASSIMI SISTEMI DEL MONDO TOLEMAICO, E COPERNICANO;

Proponendo indeterminatamente le ragioni Filofofiche, e Naturali tanto per l'ona , quanto per l'altra parte .

CON PRI

VILEGI.

IN FIORENZA, Per Gio:Batifta Landini MDCXXXII.

CON LICENZA DE SYPERIORI.



Shut yourself up with some friend in the main cabin below decks on some large ship, and have with you there some flies, butterflies, and other small flying animals. Have a large bowl of water with some fish in it; hang up a bottle that empties drop by drop into a wide vessel beneath it. With the ship standing still, observe carefully how the little animals fly with equal speed to all sides of the cabin. The fish swim indifferently in all directions; the drops fall into the vessel beneath; and, in throwing something to your friend, you need throw it no more strongly in one direction than another, the distances being equal; jumping with your feet together, you pass equal spaces in every

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When you have observed all these things carefully (though doubtless when the ship is standing still everything must happen in this way), have the ship proceed with any speed you like, so long as the motion is uniform and not fluctuating this way and that. You will discover not the least change in all the effects named, nor could you tell from any of them whether the ship was moving or standing still.



DE

MOTU CORPORUM

EX

PERCUSSIONE.





ANNO CIDIDC XLIV. Cum Privilegiis.



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And this the Cartesian philosopher may more readily admit if he observes that Descartes himself had an idea of this extension distinct from bodies ... And that the gyrations of the vortices, from which he deduced the force of the ether in receding from their centers, and therefore the whole of his mechanical philosophy, are tacitly referred to that generic extension.



PHILOSOPHIÆ									
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P	R	Ι	r	J	C	Ι	P	I	A
MATHE MATICA									

Autore J S. NEWTON, Trin. Coll. Cantab. Soc. Mathefeos Professore Lucasiano, & Societatis Regalis Sodali.

IMPRIMATUR. S. PEPYS, Reg. Soc. PRÆSES. Julii 5. 1686.

LONDINI,

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Juffu Societatis Regiæ ac Typis Josephi Streater. Prostat apud plures Bibliopolas. Anno MDCLXXXVII. • "Absolute ... time ... without reference to anything external, flows uniformly ..."

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- "The causes which distinguish true motions from relative motions are the forces impressed upon bodies to generate motion."

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- Corollary 6: "If bodies are moving in any way whatsoever with respect to one another and are urged by equal accelerative forces along parallel lines, they will all continue to move with respect to one another in the same way as they would if they were not acted on by those forces"

