

Lenses And Waves

[DOWNLOAD HERE](#)

Chapter 1 Introduction the perfect Cartesian . - A history of Traite de la Lumiere. Huygens optics. New light on Huygens. Chapter 2 1653 - 'Tractatus'.- 2.1 The Tractatus of 1653. 2.1.1 Ovals to lenses. 2.1.2 A theory of the telescope. The focal distance of a bi-convex lens. Images. Conclusion. 2.2 Dioptrics and the telescope. 2.2.1 Kepler and the mathematics of lenses. Image formation. Lenses. Perspectiva and the telescope. 2.2.2 The use of the sine law. Descartes and the ideal telescope. After Descartes. Dioptrics as mathematics. 2.2.3 The need for theory. The micrometer and telescopic sights. Understanding the telescope. Huygens position. Chapter 3 1655-1672 - 'De Aberratione'.- 3.1 The use of theory. 3.1.1 Huygens and the art of telescope making. Huygens skills. Alternative configurations. Experiential knowledge. 3.1.2 Inventions on telescopes by Huygens. 3.2 Dealing with aberrations. 3.2.1 Properties of spherical aberration.- Specilla circularia.- Theory and its applications. 3.2.2 Putting theory to practice. A new design. 3.2.3 Newton s other look and Huygens response. 3.3 Dioptrica in the context of Huygens mathematical science. 3.3.1 The mathematics of things. Huygens geometre . 3.3.2 Huygens the scholar & Huygens the craftsman. The raison d tre of Dioptrica: I instrument pour I instrument. Chapter 4 The 'Projet' of 1672.- Projet du Contenu de la Dioptrique . 4.1 The nature of light and the laws of optics. 4.1.1 Alhacen on the cause of refraction. 4.1.2 Kepler on the measure and the cause of refraction. The measure of refraction. True measures. Paralipomena and the seventeenth-century reconfiguration of optics. 4.1.3 The laws of optics in corpuscular thinking. Refraction in La Dioptrique. Epistemic aspects of Descartes account in historical context. Historian s assessment of Descartes optics. Reception of Descartes account of refraction. Barrow s causal account of refraction. 4.2 The mathematics of strange refraction. 4.2.1 Bartholinus and Huygens on Iceland Crystal. Bartholinus experiments. Huygens alternatives. 4.2.2 Rays versus waves: the mathematics of things revisited. The particular problem of strange refraction: waves versus masses. Chapter 5 1677-1679 - Waves of Light.- 5.1 A new theory of waves. 5.1.1 A first EUPHKA. The solution of the difficulte of Iceland Crystal. 5.1.2 Undulatory theory. Explaining strange refraction. 5.1.3 Traite de la Lumiere and the Projet . 5.2 Comprehensible explanations. 5.2.1 Mechanisms of light. Hobbes, Hooke and the pitfalls of mechanistic philosophy: rigid

waves. 5.2.2 Raisons de mechanique . Newton s speculations on the nature of light. The status of raisons de mechanique . 5.3 A second euphka. 5.3.1 Danish objections. Forced innovation. 5.3.2 Hypotheses and deductions. Chapter 6 1690 - Traite de la Lumiere.- 6.1 Creating Traite de la Lumiere. 6.1.1 Completing Dioptrique . Huygens dioptrics in the 1680s. 6.1.2 From Dioptrique to Traite de la Lumiere. The publication of Traite de la Lumiere. 6.2 Traite de la Lumiere and the advent of physical optics. Mathematization by extending mathematics. The matter of rays. The mathematics of light. 6.3 Traite de la Lumiere and Huygens oeuvre. 6.3.1 Huygens Cartesianism. The subtle matter of 1669. Huygens versus Newton. Huygens self-image. 6.3.2 The reception of Huygens. Chapter 7 Conclusion: Lenses & Waves.- A seventeenth-century Archimedes.- From mathematics to mechanisms.- Huygens and Descartes.- The small Archimedes.- List of figures.- Bibliography.- Index EAN/ISBN : 9781402026980 Publisher(s): Springer Netherlands Discussed keywords: Optik Format: ePub/PDF Author(s): Dijksterhuis, Fokko

[DOWNLOAD HERE](#)

Similar manuals:

[Entry Optiker, Optician, In A Diary](#)

[Businessplan Online Optiker](#)

[Pads Tauschen An Klick- Und Schraubsystem \(Unterweisung Augenoptiker / -in\) - Florian Metzel](#)

[Das Quanten-Bewusstsein. Die Quanten-Kultur. Die Quanten-Optik. - Gebhard Deissler](#)

[Businessplan Online Optiker - Tobias Bandt](#)

[MP3 Optikz - Area Fifty One Nine Covert Ops](#)

[MP3 Optik Fusion Embrace \(Extra Kool, Satyr\) - Optimistic Pessimism](#)

[MP3 Twisted Optiks - H.E.A.R.T.](#)

[MP3 Extra Kool & Satyre - Used To Be Optik Fusion](#)

[MP3 Synoptiko - Cold Hard Look](#)

[MP3 Neroptik - Fantasy EP](#)