1. Record Nr. UNINA9910821668103321 Autore Lequeux James Titolo Hippolyte Fizeau: physicist of the light / / James Lequeux Pubbl/distr/stampa Les Ulis, France:,: EDP Sciences,, [2020] ©2020 **ISBN** 2-7598-2188-9 Descrizione fisica 1 online resource (150 pages) Collana Science & history Disciplina 610.92 Soggetti Physicians - France Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Front matter -- Introduction -- Contents -- Chapter 1 The beginning Nota di contenuto of a scientific life -- Chapter 2 A fruitful collaboration -- Chapter 3 The Doppler-Fizeau effect -- Chapter 4. The velocity of light and electricity -- Chapter 5. The "crucial experiment": the velocity of light in air and water -- Chapter 6. The drag of æther -- Chapter 7. The diameter of stars -- Chapter 8. A highly esteemed scientist -- Appendix 1. Genealogy of Fizeau and his wife -- Appendix 2. Chronology --Appendix 3. Correspondence Fizeau-Foucault -- Bibliography -- Index Sommario/riassunto The French physicist Hippolyte Fizeau was the first to have directly measured the velocity of light in 1849. He discovered the shift in wavelength produced by the relative velocity of a light or sound source and an observer independently from Doppler. But it is not generally known that he was also a pioneer of photography, that he performed with Léon Foucaults magnificent interference experiments, in particular in the infrared, and also that several of his other experiments put his successors on the track to Relativity. Fizeau also imagined, in 1851, that the apparent diameter of stars could be measured by interferometry, opening the way for developments that are presently experiencing enormous success. This book is the very first devoted to the scientific work of this great physicist. Most of the experimental notes of Fizeau have been preserved as well as many of his instruments, making it possible to reconstruct the processes of his

research in an exceptionally precise and detailed manner. The book,

illustrated with numerous autographs and featuring important unpublishe d texts, is written in a lively and easily accessible way.