1. Record Nr. UNINA9910640388203321 Autore Hanslmeier Arnold Titolo Fascination astronomy: a cutting-edge introduction for all those interested in the natural sciences / / Arnold Hanslmeier Pubbl/distr/stampa Berlin, Germany:,: Springer,, [2023] ©2023 **ISBN** 9783662660201 9783662660195 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (276 pages) Disciplina 821.009356 Soggetti Astronomy Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. 1 Forces that determine the universe -- 2 The Big Bang - How it all Nota di contenuto began -- 3 The world of planets -- 4 Dwarf planets and small bodies -- 5 The mechanics of the sky -- 6 The sun - the star we live on -- 7 Stars - Formation, structure and development -- 8 The world of galaxies -- 9 Life in the universe ?. In this work, Prof. Arnold Hanslmeier provides modern and fascinating Sommario/riassunto astronomical knowledge. The book begins with a description of the origin of the universe and goes on to dark matter, black holes and the formation of the solar system. Finally, it is rounded off at the end by the exciting question: Are we alone in the universe? In this book, which originated from a lecture given at the University of Graz for students of all faculties, the author explains the interrelationships clearly and in a generally understandable way with the help of many colorful pictures, without demanding too much basic knowledge of mathematics and physics. Somewhat deeper formulas and text passages are separated from the rest of the text and can be skipped without losing the context. This third edition incorporates new findings such as the spectacular direct discovery of gravitational waves, fascinating images and data

from Pluto, and the first landing on a comet. Numerous new

photographs and illustrations have been added to aid understanding. The latest data in the field of exoplanet research has also been incorporated. The book is intended not only for students, but also for

interested laymen as well as for all those who deal with modern findings of natural science. "Physics, especially astrophysics, can be extremely exciting, I hope my readers gain just that impression by reading this book!" A. Hanslmeier The author Professor Arnold Hanslmeier is an astrophysicist at the Institute of Physics at the University of Graz. In addition to more than 400 scientific publications and several reference books, he also devotes himself very much to the comprehensible dissemination of the fascinating findings of modern astrophysics. He lectures at the University of Graz and is a visiting professor at the Universities of Vienna, Innsbruck, Toulouse, La Laguna, Tenerife and the Kiepenheuer Institute in Freiburg. Due to his special didactic abilities to present complicated things in a simple and clear way, he is an internationally sought-after speaker.