1. Record Nr. UNISA996392340803316

Autore	Pierce Thomas <1622-1691.>
Titolo	The sinner impleaded in his own court [[electronic resource]] : Wherein are represented the great discouragements from sinning, which the sinner receiveth from sin it selfe. / / By Tho: Pierce rector of Brington in Northamptonshire
Pubbl/distr/stampa	London, : Printed by R. Norton for Richard Royston, 1656
Descrizione fisica	[28], 390, [14] p
Soggetti	Sin Christian life
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index. With a final advertisement leaf. Annotation on Thomason copy: "Aug: 12:". Reproduction of the original in the British Library.
Sommario/riassunto	eebo-0018

2. Record Nr. UNINA9910758500903321

Autore	Sundnes Joakim
Titolo	Solving Ordinary Differential Equations in Python / / by Joakim Sundnes
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	3-031-46768-X
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (124 pages)
Collana	Simula SpringerBriefs on Computing, , 2512-1685 ; ; 15
Disciplina	003.3
Soggetti	Mathematics - Data processing Computer science Mathematics Computational Science and Engineering Computer Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface -- Programming a Simple ODE Solver -- Improving the Accuracy -- Stable Solvers for Stiff ODE Systems -- Adaptive Time Step Methods -- Modeling Infectious Diseases -- Programming of Difference Equations -- References -- Index.
Sommario/riassunto	This open access volume explains the foundations of modern solvers for ordinary differential equations (ODEs). Formulating and solving ODEs is an essential part of mathematical modeling and computational science, and numerous solvers are available in commercial and open source software. However, no single ODE solver is the best choice for every single problem, and choosing the right solver requires fundamental insight into how the solvers work. This book will provide exactly that insight, to enable students and researchers to select the right solver for any ODE problem of interest, or implement their own solvers if needed. The presentation is compact and accessible, and focuses on the large and widely used class of solvers known as Runge-Kutta methods. Explicit and implicit methods are motivated and explained, as well as methods for error control and automatic time step selection, and all the solvers are implemented as a class hierarchy in Python.