

# **WE3**

## **WE3 - Deluxe Edition**

EINE EINDRINGLICHE, BEWEGENDE SCIENCE-FICTION-FABEL In einer Militärbasis werden ein Hund, eine Katze und ein Hase in bizarre Cyborg-Killermaschinen verwandelt. Als das ehrgeizige Projekt übereilt beendet wird, ermöglicht eine Wissenschaftlerin den ehemaligen Haustieren die Flucht. Die suchen einen Weg nach Hause, doch sie sind für immer verändert, und brutale menschliche und nichtmenschliche Jäger sind ihnen auf den Fersen ... Mit 10 neuen Story-Seiten und üppigem Behind-the-Scenes-Anhang! Ein eindringliches Science-Fiction-Meisterwerk über die Beziehung von Mensch, Tier und Fortschritt, inszeniert von den Superstars Grant Morrison (DOOM PATROL, BATMAN) und Frank Quitely (ALL-STAR SUPERMAN).

## **We3**

A powerful tale from the ALL-STAR SUPERMAN team of Grant Morrison and Frank Quiteley. Morrison and Quiteley deliver the emotional journey of WE3—three house pets weaponized for lethal combat by the government—as they search for 'home' and attempt to ward off the shadowy agency that created them. With nervous systems amplified to match their terrifying mechanical exoskeletons, the members of Animal Weapon 3 (WE3) have the firepower of a battalion between them. But they are just the program's prototypes, and now that their testing is complete, they're slated to be permanently decommissioned, causing them to seize their one chance to make a desperate run for freedom. Relentlessly pursued by their makers, the WE3 team must navigate a frightening and confusing world where their instincts and heightened abilities make them as much a threat as those hunting them.

## **,Lux divinitatis‘ – ,Das liecht der gotheit‘**

Mit dieser synoptischen Edition der lateinischen Übersetzung des Fließenden Lichts der Gottheit Mechthilds von Magdeburg und ihrer alemannischen Rückübersetzung werden zwei Versionen eines der wichtigsten Texte der mittelalterlichen Mystik erstmals wissenschaftlich zugänglich. Mechthilds in der zweiten Hälfte des 13. Jahrhunderts entstandenes Buch thematisiert in lyrischen, hymnischen und dramatischen Textpartien die Vereinigung der menschlichen Seele mit Gott, berichtet von Visionserlebnissen und enthält Gebete sowie lehrhafte und reflektierende Abschnitte mit Bezug zur Zeitsituation. In der Forschung gilt das Werk als Beginn volkssprachlicher mystischer Literatur überhaupt. Die lateinische Übersetzung mit dem Titel Lux divinitatis entstand noch vor 1296/1298 und ordnet das Textmaterial ihrer Vorlage völlig neu. Die synoptisch abgedruckte alemannische Rückübersetzung Das liecht der gotheit entstand Ende des 15., Anfang des 16. Jahrhunderts aller Wahrscheinlichkeit nach in Basel. Eine detaillierte Einleitung, ein Parallelstellen-Apparat, Kapitelkonkordanzen sowie ausführliche Register dienen der weiterführenden Erschließung. Zudem bietet die vorliegende Edition eine umfassende Dokumentation aller primären und sekundären Rezeptionszeugen der lateinischen Übersetzung des Fließenden Lichts.

## **Dictionary of Upriver Halkomelem**

An extensive dictionary (almost 1800 pages) of the Upriver dialects of Halkomelem, an Amerindian language of B.C., giving information from almost 80 speakers gathered by the author over a period of 40 years. Entries include names and dates of citation, dialect information, phonological, morphological, syntactic, and semantic information, domain memberships of each allophone, examples of use in sentences, and much cultural information.

## **Recent Trends in Regeneration Research**

Regeneration, i.e. the replacement of lost body parts by new outgrowths or by remodelling existing tissues, has been studied for centuries. However, in recent years important developments took place in this field too, owing to new sophisticated techniques and to novel theoretical concepts. Advances in Molecular Genetics, Biochemistry, Cell and Neurobiology, Immunology, to mention a few of them, are the main causes of this resurgence of interest in regeneration. As a consequence, more and more meetings and publications are devoted, either exclusively or for a large part, to basic and applied research of regenerative processes.

"Regenerationists" scattered in laboratories all over the world and accustomed to know each other through exchange of reprints - occasionally an encounter in a large conference - tend now to form small groups, even societies and to institutionalize their meetings. Although the critical mass of scientists involved in regeneration research does not seem yet to be reached, for an autonomous development of this sector, regular and frequent meetings of experts appear useful, even necessary. Such a meeting was convened in Saronis, near Athens, Greece, from 19 to 23 September 1988 and sponsored by the NATO Science Committee and the University of Athens. The present volume contains the contributions to this Advanced Research Workshop on "Recent Trends in Regeneration Research". About 50 biologists from different countries, either members of the Alliance or outside it (U.R.S.S., India, Egypt, Switzerland, Sweden) took part, mostly as invited speakers.

## **Theoretische Mechanik**

Den Autoren gelingt es beispielhaft den Lesern die in der modernen theoretischen Physik dominierenden geometrischen Konzepte an Hand der Mechanik näher bringen. Zahlreiche Übungsaufgaben mit ausführlichen Lösungsvorschlägen vertiefen den Lehrstoff. Den Autoren gelingt es beispielhaft den Lesern die in der modernen theoretischen Physik dominierenden geometrischen Konzepte an Hand der Mechanik näher bringen. Zahlreiche Übungsaufgaben mit ausführlichen Lösungsvorschlägen vertiefen den Lehrstoff. Dieses Buch wendet sich insbesondere an Studierende mit einer Ausbildung in experimenteller Physik und Mathematik. Es soll diesem Leserkreis vor allem die in der modernen theoretischen Physik dominierenden geometrischen Konzepte an Hand der Mechanik näher bringen. Der erste Teil des Buches betont die euklidische Struktur des dreidimensionalen Raums und die damit verbundenen Symmetrien, die über das hier ausführlich abgeleitete Noethertheorem stets mit Erhaltungsgrößen verbunden sind. Ein weiterer Schwerpunkt des ersten Teils ist die Teilchenbewegung in elektromagnetischen Feldern. Im zweiten Teil steht die symplektische Geometrie des Phasenraums im Vordergrund, die eine endgültige Klärung des Zusammenhangs zwischen Erhaltungsgrößen und Symmetrietransformationen erlaubt. Zu den zahlreichen enthaltenen Übungsaufgaben bietet ein Anhang ausführliche Lösungsvorschläge, die es den Studierenden erlauben, eigene Versuche zu überprüfen.

## **Biodiversity of West African Forests**

The rain forests of West Africa have been designated as one of the world's hotspots of biodiversity. This book focuses on the biodiversity and ecology of these forests. It analyses the factors that give rise to biodiversity and the structure of tropical plant communities. It includes an atlas with ecological profiles of 280 rare plant species and 56 large timber species, each with a one page entry including a colour photograph and distribution map.

## **Prepare Operational Budgets**

Prepare Operational Budgets is for students of the Certificate IV in Accounting and has been specifically developed to meet the requirements of the unit of competency: Prepare Operational Budgets. Content is presented in bite-sized segments to allow learners to access individual parts at their own pace, and detailed mapping to learning outcomes is provided throughout the text. A complete tool for learning and assessment

for both students and instructors, the text includes an assessment tool as an appendix, which has been developed and mapped to meet all essential requirements of assessment. An end-of-chapter developing case study task provides students with practical tasks and activities that build on the concepts covered in previous chapters, enabling a scaffolded approach to the application, and holistic understanding of preparing operational budgets using a realistic case study business scenario.

## **International Review of Cytology**

International Review of Cytology presents current advances and comprehensive reviews in cell biology--both plant and animal. Articles address structure and control of gene expression, nucleocytoplasmic interactions, control of cell development and differentiation, and cell transformation and growth. Authored by some of the foremost scientists in the field, each volume provides up-to-date information and directions for future research. - Gene Expression during Amphibian Limb Regeneration - The Extracellular Matrix Biochemistry of Volvox - The Cell Biology of Basophils - Membrane Receptors for Endocytosis in the Renal Proximal Tubule

## **Mathematical Theory of a Fluid Flow Around a Rotating and Translating Body**

The book deals with qualitative analysis of the mathematical model of flow of a viscous incompressible fluid around a translating and rotating body. The considered mathematical model, which represents the description of the flow in a coordinate system attached to the body, is derived from the Navier–Stokes equations by means of an appropriate transformation. The core of the book is the mathematical theory of the transformed equations. Most of the text is devoted to the theory of the linearized versions of these equations (i.e. the Stokes- and Oseen-type equations), because they play a fundamental role in the theory of the complete nonlinear system. Considering strong, weak, and very weak solutions, we present the L<sub>2</sub> and L<sub>q</sub> theories and the weighted space theory (with Muckenhoupt's weights) in the whole space and in an exterior domain. The book also contains the spectral analysis of the associated linear Stokes-Oseen-type operators and the information on semigroups generated by these operators, and related resolvent estimates. Moreover, the book describes the asymptotic behavior of solutions and leading profiles of solutions for linear and as well as nonlinear systems. Further, the book contains studies of the problem with artificial boundary (important in numerical analysis), an introduction to the theory of the corresponding complete nonlinear system in both steady and nonsteady cases, a brief description of the situation when the rotation is not parallel to the velocity at infinity and necessary estimates of the related Oseen kernels.

## **Atkinson's Principles of Clinical Pharmacology**

\*\*Selected for Doody's Core Titles® 2024 in Pharmacology\*\* Atkinson's Principles of Clinical Pharmacology, Fourth Edition is the essential reference on the pharmacologic principles underlying the individualization of patient therapy and contemporary drug development. This well-regarded survey continues to focus on the basics of clinical pharmacology for the development, evaluation and clinical use of pharmaceutical products while also addressing the most recent advances in the field. Written by leading experts in academia, industry, clinical and regulatory settings, the fourth edition has been thoroughly updated to provide readers with an ideal reference on the wide range of important topics impacting clinical pharmacology. - Presents the essential knowledge for effective practice of clinical pharmacology - Includes a new chapter and extended discussion on the role of personalized and precision medicine in clinical pharmacology - Offers an extensive regulatory section that addresses US and international issues and guidelines - Provides extended coverage of earlier chapters on transporters, pharmacogenetics and biomarkers, along with further discussion on "Phase 0" studies (microdosing) and PBPK

## **Polk's Pompano Beach (Broward County, Fla.) City Directory**

Exploring image and imagination in conjunction with natural environments, the animal, and the human, this

collection of essays turns the ecocritical and ecocompositional gaze upon comic studies. The comic form has a long tradition of representing environmental rhetoric. Through discussions of comics including A.D.: New Orleans After the Deluge, We3, Concrete, and Black Orchid, these essays bring the rich work of ecological criticism into dialogue with the multi-faceted landscape of comics, graphic novels, web-comics, cartoons, and animation. The contributors ask not only how nature and environment are portrayed in these texts but also how these textual forms inform how we come to know nature and environment--or what we understand those terms to represent. Interdisciplinary in approach, this collection welcomes diverse approaches that integrate not only ecocriticism and comics studies, but animal studies, posthumanism, ecofeminism, queer ecology, semiotics, visual rhetoric and communication, ecoseeing, image-text studies, space and spatial theories, writing studies, media ecology, ecomedia, and other methodological approaches.

## **EcoComix**

The definitive guide for adventurers crossing the continent since its first edition in 1991.

## **Africa Overland**

2020-21 IES/ESE GENERAL STUDIES & ENGINEERING APTITUDE CIVIL ENGINEERING SOLVED PAPERS

## **GENERAL STUDIES & ENGINEERING APTITUDE (2020-21 IES/ESE)**

Superheroes and Critical Animal Studies explores and puts into dialogue two growing field of studies, comic studies and critical animal studies. The book's aim is to create a form of praxis that people can use to actualize many of the values superheroes strive to protect. To this end, contributor chapters are divided into sections on the foundation of superhero representation and how to teach it, criticisms of particular superheroes and how they fall short of truly protecting the planet, and interpretations of specific characters that can be read to produce a positive orientation to the nonhuman world and craft strategies to promote liberation in the real world. Altogether, the book produces a form of scholarship on the media that is both intersectional in scope and tailored to have an impact on the reader beyond theorizing superheroes for theorization's sake.

## **1986 Linear Accelerator Conference Proceedings**

This Volume 5 of the successful book package \"Multiphase Flow Dynamics\" is devoted to nuclear thermal hydraulics which is a substantial part of nuclear reactor safety. It provides knowledge and mathematical tools for adequate description of the process of transferring the fission heat released in materials due to nuclear reactions into its environment. It step by step introduces into the heat release inside the fuel, temperature fields in the fuels, the \"simple\" boiling flow in a pipe described using ideas of different complexity like equilibrium, non equilibrium, homogeneity, non homogeneity. Then the \"simple\" three-fluid boiling flow in a pipe is described by gradually involving the mechanisms like entrainment and deposition, dynamic fragmentation, collisions, coalescence, turbulence. All heat transfer mechanisms are introduced gradually discussing their uncertainty. Different techniques are introduced like boundary layer treatments or integral methods. Comparisons with experimental data at each step demonstrate the success of the different ideas and models. After an introduction of the design of the reactor pressure vessels for pressurized and boiling water reactors the accuracy of the modern methods is demonstrated using large number of experimental data sets for steady and transient flows in heated bundles. Starting with single pipe boiling going through boiling in the rod bundles the analysis of complete vessel including the reactor is finally demonstrated. Then a powerful method for nonlinear stability analysis of flow boiling and condensation is introduced. Models are presented and their accuracies are investigated for describing critical multiphase flow at different level of complexity. Therefore the book presents a complete coverage of the modern Nuclear Thermal Hydrodynamics. This present third edition includes various updates, extensions, improvements and corrections.

## **Superheroes and Critical Animal Studies**

A companion to the popular introductory text in linguistics.

## **Multiphase Flow Dynamics 5**

The nuclear thermal hydraulic is the science providing knowledge about the physical processes occurring during the transferring the fission heat released in structural materials due to nuclear reactions into its environment. Along its way to the environment the thermal energy is organized to provide useful mechanical work or useful heat or both. Chapter 1 contains introductory information about the heat release in the reactor core, the thermal power and thermal power density in the fuel, structures and moderator, the influence of the thermal power density on the coolant temperature, the spatial distribution of the thermal power density. Finally some measures are introduced for equalizing of the spatial distribution of the thermal power density. Chapter 2 gives the methods for describing of the steady and of the transient temperature fields in the fuel elements. Some information is provided regarding influence of the cladding oxidation, hydrogen diffusion and of the corrosion product deposition on the temperature fields. Didactically the nuclear thermal hydraulic needs introductions at different level of complexity by introducing step by step the new features after the previous are clearly presented. The followed two Chapters serve this purpose. Chapter 3 describes mathematically the “simple” steady boiling flow in a pipe. The steady mass-, momentum- and energy conservation equations are solved at different level of complexity by removing one after the other simplifying assumptions. First the idea of mechanical and thermodynamic equilibrium is introduced.

## **A Linguistics Workbook**

Food Engineering Handbook: Food Engineering Fundamentals provides a stimulating and up-to-date review of food engineering phenomena. Combining theory with a practical, hands-on approach, this book covers the key aspects of food engineering, from mass and heat transfer to steam and boilers, heat exchangers, diffusion, and absorption. A complement to Food Engineering Handbook: Food Process Engineering, this text: Explains the interactions between different food constituents that might lead to changes in food properties Describes the characterization of the heating behavior of foods, their heat transfer, heat exchangers, and the equipment used in each food engineering method Discusses rheology, fluid flow, evaporation, and distillation and includes illustrative case studies of food behaviors Presenting cutting-edge information, Food Engineering Handbook: Food Engineering Fundamentals is an essential reference on the fundamental concepts associated with food engineering today.

## **Multiphase Flow Dynamics 4**

A workbook supplement to Linguistics: An Introduction to Language and Communication.

## **Food Engineering Handbook**

Geschichte Das Virus der Lymphocytären Choriomeningitis (LCM) wurde im Jahre 1934 in den USA von CH. ARMSTRONG und R. D. LILLIE zufällig gefunden, als sie über die St. Louis-Enzephalitis arbeiteten und sich bemühten, von dem Organ material einer Frau ausgehend, den Erreger in Affen-Passagen fortzuführen. Das neu gefundene, mit dem St. Louis-Virus nicht identische Virus führte bei Mäusen nach intracerebraler Injektion zu charakteristischen Krankheitszeichen und einer lymphocytären Infiltration der Meningen und der Plexus chorioidei. - E. TRAUB entdeckte im Jahre 1935 den gleichen Erreger in einer Kolonie weißer Mäuse in Princeton (USA). Die erste Isolierung vom Menschen gelang TH. M. RIVERS und T. F. McNAIR SCOTT (1935), und zwar aus dem Liquor zweier Kranker mit »abakterieller« Meningitis. Die intensiven Untersuchungen E. TRAUBS (1936) über das Verhalten des LCM-Virus bei der Maus lenkten die Aufmerksamkeit auf diesen Nager als mögliches Virusreservoir und als Ansteckungsquelle für den

Menschen. Diese Vermutung wurde von CH. ARMSTRONG und L. K. SWEET (1939) sowie von CH. ARMSTRONG, J. J. WALLACE und L. Ross (1940) noch bekräftigt, als sie in den Wohnungen ihrer Kranken fast ausnahmslos virusverseuchte Mäuse nachweisen konnten. In der folgenden Zeit wurden weitere Kenntnisse über die Epidemiologie und die verschiedenen klinischen Erscheinungsformen dieser Infektionskrankheit sowie über die immunbiologischen Reaktionen gewonnen, die das LCM-Virus im Wirtsorganismus hervorzurufen vermag. Die von einigen Autoren zunächst geäußerte Vermutung, daß es sich bei diesem Virus nun um den alleinigen Erreger der »aseptischen« Meningitis handle, bestätigte sich jedoch nicht.

## A Linguistics Workbook

Mit dem Werk "Dreihundert Schachpartien" legte Dr. Siegbert Tarrasch nicht nur eine umfangreiche Sammlung seiner interessantesten Partien bis zum Jahre 1894 vor - übrigens auch mehrere Verlustpartien(!) -, sondern schrieb gleichsam ein Lehrbuch des Schachspiels. Darüber hinaus enthält das Buch zahlreiche autobiografische Passagen. Das zweite Werk in diesem Schachklassiker-Doppelband ist Tarraschs Wettkampfbuch zum Weltmeisterschaftskampf im Jahre 1908, in welchem er den amtierenden Titelträger Dr. Emanuel Lasker herausforderte. Tarraschs Ausführungen liefern hier neben umfassenden Partieanalysen auch ein lebendiges Bild von den Geschehnissen am Randes des Wettkampfes. Der zweite Schachweltmeister Emanuel Lasker und sein Widersacher Siegbert Tarrasch waren anerkanntermaßen die herausragenden Schachspieler ihrer Epoche.

## Untersuchungen zur Epidemiologie des Virus der Lymphocytären Choriomeningitis (LCM) in Westdeutschland

This is the third volume of a comprehensive and elementary treatment of finite p-group theory. Topics covered in this volume: impact of minimal nonabelian subgroups on the structure of p-groups, classification of groups all of whose nonnormal subgroups have the same order, degrees of irreducible characters of p-groups associated with finite algebras, groups covered by few proper subgroups, p-groups of element breadth 2 and subgroup breadth 1, exact number of subgroups of given order in a metacyclic p-group, soft subgroups, p-groups with a maximal elementary abelian subgroup of order  $p^2$ , p-groups generated by certain minimal nonabelian subgroups, p-groups in which certain nonabelian subgroups are 2-generator. The book contains many dozens of original exercises (with difficult exercises being solved) and a list of about 900 research problems and themes.

## Dreihundert Schachpartien / Der Schachwettkampf Lasker - Tarrasch um die Weltmeisterschaft im August - September 1908

This book provides broad and comprehensive coverage of the entire EDA flow. EDA/VLSI practitioners and researchers in need of fluency in an "adjacent" field will find this an invaluable reference to the basic EDA concepts, principles, data structures, algorithms, and architectures for the design, verification, and test of VLSI circuits. Anyone who needs to learn the concepts, principles, data structures, algorithms, and architectures of the EDA flow will benefit from this book. - Covers complete spectrum of the EDA flow, from ESL design modeling to logic/test synthesis, verification, physical design, and test - helps EDA newcomers to get "up-and-running" quickly - Includes comprehensive coverage of EDA concepts, principles, data structures, algorithms, and architectures - helps all readers improve their VLSI design competence - Contains latest advancements not yet available in other books, including Test compression, ESL design modeling, large-scale floorplanning, placement, routing, synthesis of clock and power/ground networks - helps readers to design/develop testable chips or products - Includes industry best-practices wherever appropriate in most chapters - helps readers avoid costly mistakes

## **Groups of Prime Power Order. Volume 3**

One of the most eclectic and distinctive writers currently working in comics, Grant Morrison (b. 1960) brings the auteurist sensibility of alternative comics and graphic novels to the popular genres-superhero, science fiction, and fantasy-that dominate the American and British comics industries. His comics range from bestsellers featuring the most universally recognized superhero franchises (All-Star Superman, New X-Men, Batman) to more independent, creator-owned work (The Invisibles, The Filth, We3) that defies any generic classification. In *Grant Morrison: Combining the Worlds of Contemporary Comics*, author Marc Singer examines how Morrison uses this fusion of styles to intervene in the major political, aesthetic, and intellectual challenges of our time. His comics blur the boundaries between fantasy and realism, mixing autobiographical representation and cultural critique with heroic adventure. They offer self-reflexive appraisals of their own genres while they experiment with the formal elements of comics. Perhaps most ambitiously, they challenge contemporary theories of language and meaning, seeking to develop new modes of expression grounded in comics' capacity for visual narrative and the fantasy genres' ability to make figurative meanings literal.

## **Electronic Design Automation**

In amateur chess games, the most popular opening move for White is 1.e4, and the most reliable reply for Black is 1...e5, says FIDE Master Or Cohen. In this book, Cohen has created a vibrant and robust opening repertoire for Black after 1...e5, based on the Petroff Defence. Cohen presents inventive ways for Black to fight for the initiative in this dependable opening. He covers the entire spectrum, the main variations as well as the most unexpected and bizarre sidelines. In case White does not allow the Petroff, Cohen offers a set of recommendations for Black that is no less important and principled; his repertoire against the Vienna and the King's Gambit, for example, is new and explosive. Most amateur White players faced with the Petroff will think that they will have an easy time, based on the peaceful reputation of this great opening among top grandmasters. Black players who have studied Or Cohen's book will make their life quite miserable. ,

## **Grant Morrison**

\* Uses a pedagogical approach that makes a mathematically challenging subject easier and more fun to learn  
\* Self-contained and standalone text that may be used in the classroom, for an online course, for self-study, as a reference \* Using MAPLE allows the reader to easily and quickly change the models and parameters

## **A Vigorous Chess Opening Repertoire for Black**

The Sicilian Defence is the most widely played chess opening, both at club level as well as among top grandmasters. Since Black gets dynamic play in almost all variations, black players of all levels will probably continue to play the Sicilian for a long time to come. It has been difficult for White to obtain any advantage in Sicilian sidelines, and this book therefore presents a complete repertoire for White in the most widely played main lines: the Open Sicilians with 1.e4 c5 2.Nf3. All of Black's possible answers are covered. 'Dismantling the Sicilian' is clearly organized, and each variation is presented with its history, its main ideas, its typical tactics and strategies, and with instructive games. The authors thoroughly explain the relevant themes and always summarizes the most important features. This a completely new edition, updated and extended from the original 2009 publication.

## **Computer Algebra Recipes for Mathematical Physics**

This book computes the first- and second-order derivative matrices of skew ray and optical path length, while also providing an important mathematical tool for automatic optical design. This book consists of three parts. Part One reviews the basic theories of skew-ray tracing, paraxial optics and primary aberrations – essential reading that lays the foundation for the modeling work presented in the rest of this book. Part Two derives

the Jacobian matrices of a ray and its optical path length. Although this issue is also addressed in other publications, they generally fail to consider all of the variables of a non-axially symmetrical system. The modeling work thus provides a more robust framework for the analysis and design of non-axially symmetrical systems such as prisms and head-up displays. Lastly, Part Three proposes a computational scheme for deriving the Hessian matrices of a ray and its optical path length, offering an effective means of determining an appropriate search direction when tuning the system variables in the system design process.

## Dismantling the Sicilian

This book discusses practical applications of reliability and statistical methods and techniques in various disciplines, using machine learning, artificial intelligence, optimization, and other computation methods. Bringing together research from international experts, each chapter aims to cover both methods and practical aspects on reliability or statistical computations with emphasis on applications. 5G and IoT are set to generate an estimated 1 billion terabytes of data by 2025 and companies continue to search for new techniques and tools that can help them practice data collection effectively in promoting their business. This book explores the era of big data through reliability and statistical computing, showcasing how almost all applications in our daily life have experienced a dramatic shift in the past two decades to a truly global industry. Including numerous illustrations and worked examples, the book is of interest to researchers, practicing engineers, and postgraduate students in the fields of reliability engineering, statistical computing, and machine learning.

## Advanced Geometrical Optics

The newest addition to the Harris and Harris family of Digital Design and Computer Architecture books, this RISC-V Edition covers the fundamentals of digital logic design and reinforces logic concepts through the design of a RISC-V microprocessor. Combining an engaging and humorous writing style with an updated and hands-on approach to digital design, this book takes the reader from the fundamentals of digital logic to the actual design of a processor. By the end of this book, readers will be able to build their own RISC-V microprocessor and will have a top-to-bottom understanding of how it works. Beginning with digital logic gates and progressing to the design of combinational and sequential circuits, this book uses these fundamental building blocks as the basis for designing a RISC-V processor. SystemVerilog and VHDL are integrated throughout the text in examples illustrating the methods and techniques for CAD-based circuit design. The companion website includes a chapter on I/O systems with practical examples that show how to use SparkFun's RED-V RedBoard to communicate with peripheral devices such as LCDs, Bluetooth radios, and motors. This book will be a valuable resource for students taking a course that combines digital logic and computer architecture or students taking a two-quarter sequence in digital logic and computer organization/architecture.

- Covers the fundamentals of digital logic design and reinforces logic concepts through the design of a RISC-V microprocessor
- Gives students a full understanding of the RISC-V instruction set architecture, enabling them to build a RISC-V processor and program the RISC-V processor in hardware simulation, software simulation, and in hardware
- Includes both SystemVerilog and VHDL designs of fundamental building blocks as well as of single-cycle, multicycle, and pipelined versions of the RISC-V architecture
- Features a companion website with a bonus chapter on I/O systems with practical examples that show how to use SparkFun's RED-V RedBoard to communicate with peripheral devices such as LCDs, Bluetooth radios, and motors
- The companion website also includes appendices covering practical digital design issues and C programming as well as links to CAD tools, lecture slides, laboratory projects, and solutions to exercises
- See the companion EdX MOOCs ENGR85A and ENGR85B with video lectures and interactive problems

## Applications in Reliability and Statistical Computing

Includes book reviews and abstracts.

Digital Design and Computer Architecture, RISC-V Edition

Der deutsche »Macer« ist das älteste umfangreichere Kräuterbuch in deutscher Sprache. Es dürfte im 2. Viertel des 13. Jahrhunderts im thüringischen Sprachraum entstanden sein. Bis ins 16. Jahrhundert wurde der Text, entweder vollständig oder in Teilen, in über 130 Überlieferungszeugen tradiert; er ist damit das am weitesten verbreitete deutschsprachige Kräuterbuch des Mittelalters. Es wurde von einem anonymen Verfasser nach verschiedenen lateinischen Vorlagen bearbeitet. Als Hauptquelle gilt »De viribus herbarum«, ein Lehrgedicht, das in der 1. Hälfte des 11. Jahrhunderts Odo von Meung (auch Macer Floridus genannt) im Umkreis der Domschule von Orléans schrieb. Der deutsche »Macer« behandelt in 97 Kapiteln ebenso viele Heilpflanzen. Wie in allen mittelalterlichen Kräuterbüchern werden die Pflanzen nahezu ausschließlich unter dem Gesichtspunkt ihrer medizinischen Verwertbarkeit vorgestellt, ihre Anwendung bei der Behandlung von Krankheiten steht eindeutig im Vordergrund. Das Werk, das zu den zentralen Texten der mittelalterlichen deutschen Medzinliteratur zählt, wird hier erstmals kritisch herausgegeben. Erläuterungen zum Text sowie ein Wörterbuch sollen helfen, den Text auch für nichtgermanistische Interessenten zu erschließen. Der Untersuchungsteil beginnt mit einem kurzen Abriß der Gattungsgeschichte der Kräuterbücher, wobei im Anschluß daran die dem deutschen »Macer« vorangehenden mittelalterlichen Kräuterbücher einzeln vorgestellt werden. Im Mittelpunkt der Studien steht die Darstellung der umfangreichen Text- und Überlieferungsgeschichte sowie vor allem die Analyse der Mitüberlieferung in den Überlieferungszeugen, die als eine kleine Literaturgeschichte der medizinischen Fachliteratur gelesen werden kann. Im Anhang werden die lateinischen Quellentexte, insbesondere »De viribus herbarum« des Macer Floridus nach der 1832 erschienenen Edition von Choulant abgedruckt.

# The Ohio Journal of Science

Der deutsche ›Macer‹ (Vulgatfassung) – Mit einem Abdruck des lateinischen Macer Floridus ›De viribus herbarum‹