The Cma 2012 Doppler Velocity Sensor Technical Description

7 Fig. 3. Photographie de la lueur nocturne it I'horizon, obtenue it bord d'une fusee Aerobee it 184 km d'altitude Ie Ier (I.

A comprehensive reference standard for the discipline, Canine and Feline Gastroenterology covers the biology, pathobiology, and diagnosis and treatment of diseases of the gastrointestinal, pancreatic, and hepatobiliary systems. An international team of experts, including 85 authors from 17 different countries, led by Robert Washabau and Michael Day, covers everything from minor problems such as adverse food reactions to debilitating inflammatory, infectious, metabolic, and neoplastic diseases of the digestive system. This authoritative text utilizes an evidence-based approach to reflect the latest science and research, complemented by principles of problem solving, algorithms to improve clinical diagnoses, and extensive full-color illustrations. For generalists and specialists alike, this gastroenterology reference should be part of every serious practitioner's professional library. A comprehensive, 928-page reference standard covers the discipline of canine and feline gastroenterology. An international focus is provided by 85 authors from 17 different countries, including renowned experts in veterinary gastroenterology, internal medicine, pathology, clinical pathology, radiology, and infectious disease. Coverage of the entire breadth and depth of gastroenterology ranges from biology to pathobiology, as well as diagnosis and treatment of diseases of the gastrointestinal, pancreatic, and hepatobiliary systems. Current information on GI microflora, immunology, cellular growth, and systems integration provides a foundation for treating clinical problems. Coverage of diseases in dogs and cats includes the oral cavity, esophagus, stomach, small intestine, large intestine, colon, anorectum, liver and biliary tract, exocrine pancreas, peritoneum, and associated vasculature. A focus on patient management examines the full range of procedures and techniques essential to diagnosis and treatment from clinical signs and diagnosis to nutritional support and pharmacologic management of disease. Clear explanations of current diagnostic modalities include laboratory tests, molecular methods, diagnostic imaging, endoscopy, and histopathology, also showing how to interpret and utilize results. A strong clinical approach emphasizes need-to-know information for managing the common and not-so-common G.I. clinical problems of everyday practice. Full-color photographs and illustrations depict concepts, conditions, and procedures. An evidence-based medicine perspective reflects the latest research as well as the modern practice of veterinary medicine. Logical, coherent, and consistent internal organization makes this a reader-friendly edition. Problem-based algorithms help in diagnosing every G.I. clinical problem from A to Z. A stand-alone section on the pharmacologic approach to G.I. disease offers quick and easy drug reference.

Double and multiple stars are the rule in the stellar population, and single stars

the minority, as the abundance of binary systems in the space surrounding the sun shows beyond doubt. Numerous stellar features, and methods of their exploration, ensue specifically from the one but widespread property, the binary nature. Stellar masses are basic quantities for the theory of stellar structure and evolution, and they are ob tained from binary-star orbits where they depend on the cube of observed parameters; this fact illustrates the significance of orbits as well as the accuracy requirements. Useful in dating stellar history is the knowledge that components of a system, different though they may appear, are of the same origin and age. Between star formation and the genesis of binaries a direct connection can be traced. The later stages of stellar life branch into a great variety as mutual influence between the components of a close binary pair develops. Transfer and exchange of mass and the presence of angular momentum in the orbit give rise to special tracks of evolution, not found for single stars, and to peculiar spectral groups. This is not a new story but it has a new ending: The patterns of evolution involving mass transfer appear to lead ultimately to single objects.

Intracranial Pressure is a linking keyword, uniting various aspects of diagnostics and treatment of hydrocephalus, head injury, subarachnoid haemorrhage, and brain ischaemia. This volume contains selected papers presented at the XIth International Symposium on Intracranial Pressure and Brain Biochemical Monitoring, held in Cambridge, UK, in July 2000. Various clinical and experimental methodologies are discussed including multiparameter brain biochemical monitoring (including brain oxygenation, microdialysis and novel imaging techniques), assessment of cerebral autoregulation, measurement of brain compliance, etc. This state-of-the-art volume introduces neuroscientists into a world of new techniques, models, monitoring modalities but also theories and new concepts, which highlight directions for the further research and future clinical practice.

Summarizes state of the art observations and theories pertaining to astrophysical masers and their environments, for graduate students and researchers.

This textbook begins with a description of the Earth's plasma environment, followed by the derivation of single particle motions in electromagnetic fields, with applications to the Earth's magnetosphere. Also discussed are the origin and effects of collisions and conductivities, formation of the ionosphere, magnetospheric convection and dynamics, and solar wind-magnetosphere coupling.The second half of the book presents a more theoretical foundation of plasma physics, starting with kinetic theory. Introducing moments of distribution function permits the derivation of the fluid equations, followed by an analysis of fluid boundaries, with the Earth's magnetopause and bow shock as examples, and finally, fluid and kinetic theory are applied to derive the relevant wave modes in a plasma.This revised edition seamlessly integrates new sections on magnetopause reconstruction, as well as instability theory and thermal fluctuations based on new developments in space physics. Applications such as the important problems of collisionless reconnection and collisionless shocks are covered, and some problems have also been included at the end of each chapter./a

The recent interest in the pharmacology of the skin and the treatment of its diseases has come about for two reasons. The first is a realisation that many aspects of pharmacology can be

studied as easily in human skin, where they may be more relevant to human physiology and diseases, as in animal models. Examples of this are the action of various vasoactive agents and the isolation of mediators of inflammation after UV irradiation and antigen-induced dermatitis. The second reason is the fortuitous realisation that a pharmacological approach to the treatment of skin disease need not always await the full elucidation of etiology and mechanism. For example, whilst the argument continued unresolved as to whether the pilo-sebaceous infection which constitutes acne was due to a blocked duct or to a simple increase in sebum production, 13-cis-retinoic acid was found quite by chance totally to ablate the disease; again, whilst cyclosporin, fresh from its triumphs in organ transplantation, has been found able to suppress the rash of psoriasis, it has resuscitated the debate on etiology. We are therefore entering a new era in which the pharmacology and clinical pharmacology of skin are being studied as a fascinating new way of exploring questions of human physiology and pharmacology as well as an important step in the development and study of new drugs, use of which will improve disease control and at the same time help to define pathological mechanisms.

This book presents descriptions of numerical models for testing cumulus in cloud fields. It is divided into six parts. Part I provides an overview of the problem, including descriptions of cumulus clouds and the effects of ensembles of cumulus clouds on mass, momentum, and vorticity distributions. A review of closure assumptions is also provided. A review of "classical" convection schemes in widespread use is provided in Part II. The special problems associated with the representation of convection in mesoscale models are discussed in Part III, along with descriptions of some of the commonly used mesoscale schemes. Part IV covers some of the problems associated with the representation of convection in climate models, while the parameterization of slantwise convection is the subject of Part V.

"Ultrasonography of the Prenatal and Neonatal Brain is a clinical text and atlas valuable to both residents and practitioners. This comprehensive reference covers topics ranging from biometry of the fetal brain and using ultrasound and MRI to diagnose the fetal face, eye, and brain to neurobehavioral development of the fetal brain. The third edition is completely updated to reflect the tremendous advances made in resolution and three dimensional Doppler technology since the release of the last edition"--Provided by publisher.

Over 3.400 total pages ... Includes: Electronic Warfare and Radar Systems Engineering Handbook, 2013, 455 pages Electronic Warfare and Radar Systems Engineering Handbook, 2012, 399 pages Electronic Warfare and Radar Systems Engineering Handbook, 1999, 287 pages Electronic Warfare and Radar Systems Engineering Handbook, 1997, 602 pages Electronic Warfare Fundamentals, 2000, 351 pages Radar Fundamentals Student Guide Volume II, no date, 355 pages Principles of Naval Weapons Systems, no date, 351 pages Electronic Warfare, U.S. Marine Corps, 2002, 73 pages Marine Corps Warfighting Publication (MCWP) 6-22, Communications and Information Systems, 1999, 146 pages Marine Corps Warfighting Publication (MCWP) 6-22D, Field Antenna Handbook, 1999, 146 pages, 192 pages Plan / Design / Layout Of Satellite Communication Systems, 1994, 169 pages

The first IUPAC Manual of Symbols and Terminology for Physicochemical Quantities and Units (the Green Book) of which this is the direct successor, was published in 1969, with the object of 'securing clarity and precision, and wider agreement in the use of symbols, by chemists in different countries, among physicists, chemists and engineers, and by editors of scientific journals'. Subsequent revisions have taken account of many developments in the field, culminating in the major extension and revision represented by the 1988 edition under the simplified title Quantities, Units and Symbols in Physical Chemistry.

This 2007, Third Edition, is a further revision of the material which reflects the experience of the contributors with the previous editions. The book has been systematically brought up to date and new sections have been added. It strives to improve the exchange of scientific information among the readers in different disciplines and across different nations. In a rapidly expanding volume of scientific literature where each discipline has a tendency to retreat into its own jargon this book attempts to provide a readable compilation of widely used terms and symbols from many sources together with brief understandable definitions. This is the definitive guide for scientists and organizations working across a multitude of disciplines requiring internationally approved nomenclature.

Here is a practical, comprehensive text on fetal diagnosis, management and therapy which differs from competing texts in maternal-fetal medicine by focusing on the fetus rather than the pregnant woman. All new technologies in the field, from ulstrasound diagnosis to intrauterine treatment, are placed in perspective for the practicing physician.

This is the first volume of a two-volume guide to designing, conducting and interpreting laboratory and field experiments in a broad range of topics associated with hydraulic engineering. Specific guidance is provided on methods and instruments currently used in experimental hydraulics, with emphasis on new and emerging measurement technologies and methods of analysis. Additionally, this book offers a concise outline of essential background theory, underscoring the intrinsic connection between theory and experiments. This book is much needed, as experimental hydraulicians have had to refer to guidance scattered in scientific papers or specialized monographs on essential aspects of laboratory and fieldwork practice. The book is the result of the first substantial effort in the community of hydraulic engineering to describe in one place all the components of experimental hydraulics. Included is the work of a team of more than 45 professional experimentalists, who explore innovative approaches to the vast array of experiments of differing complexity encountered by today’s hydraulic engineer, from laboratory to field, from simple but well-conceived to complex and well-instrumented. The style of this book is intentionally succinct, making frequent use of convenient summaries, tables and examples to present information. All researchers, practitioners, and students conducting or evaluating experiments in hydraulics will find this book useful.

Issues in Environmental Research and Application: 2013 Edition is a ScholarlyEditions™ book that delivers timely, authoritative, and comprehensive information about Arid Environments. The editors have built Issues in Environmental Research and Application: 2013 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Arid Environments in this book to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Issues in Environmental Research and Application: 2013 Edition has been produced by the world’s leading scientists, engineers, analysts, research

institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at http://www.ScholarlyEditions.com/.

No part of the Hertzsprung-Russell diagram shows a more pronounced diversity of stellar types than the upper part, which contains the most luminous stars. Can one visualize a larger difference than between a luminous, young and extremely hot Of star, and a cool, evolved pulsating giant of the Mira type, or an S-type supergiant, or - again at the other side of the diagram - the compact nucleus of a planetary nebula? But there is order and unity in this apparent disorder! Virtually all types of bright stars are evolutionally related, in one way or the other. Evolution links bright stars. In many cases the evolution is speeded up by, or at least intimately related to various signs of stellar instability. Bright stars lose mass, either continuously or in dramatic sudden events, they vibrate or pulsate - and with these tenuous, gigantic objects this often happens in a most bizarre fashion. Sometimes the evolution goes so fast that fundamental changes are observable in the time span of a human's life - several of such cases have now been identified.

This volume contains the most recent works on intracranial pressure and neuromonitoring in brain injury selected from 300 abstracts submitted to the 10th International Symposium on Intracranial Pressure. It includes state of the art monitoring of the brain injured patient in intensive care as well as the current state of knowledge in neurochemical and oxygen monitoring of the injured brain. Recent advances in molecular mechanisms of injury and the pathophysiology of ischemia and trauma are also included. "... this publication presents a comprehensive survey of the present state of art in the field and thus gives directions for further research to those engaged in ICP measurement and neuromonitoring". Intensive Care Med

This specialized workshop was conceived during the workshop on "Non isotropic and Variable Outflows from Stars", which was held at the Space Telescope Science Institute in October, 1991. At that meeting, the four of us collectively decided that the time was ripe for an even more focussed discussion of the basic issues in the area of hot-star wind instability and its observable manifestations. Not that the big problems have been solved! Rather, we are currently in a phase of rapid development, both with regard to the models and to the observations. The key issue at this new workshop would be to decide how the time-dependent structures observed in hot-star winds (e. g. , NACs, DACs, blobs, clumps, filaments, shells, puffs, jets, etc.) relate to radiative and other instabilities. Further questions concern the role of turbulence and the nature of its driver, and the effect of stellar rotation, pulsation, and magnetic fields on time-dependent phenomena in hot-star winds. Of no less importance is the impact of stellar wind variability on the derivation of mass-loss rates, on stellar evolution, and on momentum/energy deposition in the interstellar medium. To attain our goal of maximum confrontation (in the positive sense!) we decided: (1) to limit the workshop to the observers and theoreticians most active in this field in the world; (2) to insist that virtually all participants present a talk, thereby avoiding the distraction of poster

sessions; and (3) to allocate approximately half of the allotted time to discussion.
Laser Spectroscopy IX documents the proceedings of the Ninth International Conference on Laser Spectroscopy, held in Bretton Woods, New Hampshire, June 18-23, 1989. The scientific program consisted of oral and poster presentations. There were 52 invited talks organized into 14 topical sessions, some with panel discussions. About 60 additional invited contributions were presented in three evening poster sessions. Also included were 15 post deadline oral and poster presentations. These proceedings contain summaries of essentially all of these contributions. The contributions made by researchers at the conference are organized into 14 parts. Part I focuses on laser cooling. Part II presents studies on laser spectroscopy. Part III includes papers on cavity Q.E.D. Parts IV, V, and VI examine noise and coherence, quantum size effects, and surface spectroscopy, respectively. Part VII deals with laser light sources. Part VIII includes papers on trapped ion spectroscopy. Part IX covers ultrafast spectroscopy while Part X takes up fundamental measurements, including those of positronium, the Rydberg constant, and lead and thallium isotopes. Parts XI-XIV cover, respectively, molecular spectroscopy and dynamics, applications in radiation forces, highly excited states and dynamics, and laser spectroscopy for biomedicine.
Computational complexity is a serious bottleneck for the design process in virtually any engineering area. While migration from prototyping and experimental-based design validation to verification using computer simulation models is inevitable and has a number of advantages, high computational costs of accurate, high-fidelity simulations can be a major issue that slows down the development of computer-aided design methodologies, particularly those exploiting automated design improvement procedures, e.g., numerical optimization. The continuous increase of available computational resources does not always translate into shortening of the design cycle because of the growing demand for higher accuracy and necessity to simulate larger and more complex systems. Accurate simulation of a single design of a given system may be as long as several hours, days or even weeks, which often makes design automation using conventional methods impractical or even prohibitive. Additional problems include numerical noise often present in the simulation data, possible presence of multiple locally optimum designs, as well as multiple conflicting objectives. In this edited book, various techniques that can alleviate solving computationally expensive engineering design problems are presented. One of the most promising approaches is the use of fast replacement models, so-called surrogates, that reliably represent the expensive, simulation-based model of the system/device of interest but they are much cheaper and analytically tractable. Here, a group of international experts summarize recent developments in the area and demonstrate applications in various disciplines of engineering and science. The main purpose of the work is to provide the basic concepts and formulations of the surrogate-based modeling and optimization paradigm, as well as discuss relevant modeling techniques, optimization algorithms and design procedures. Therefore, this book should be useful to researchers and engineers from any discipline where computationally heavy simulations are used on daily basis in the design process.
Written for postgraduates and researchers, this is an up-to-date survey of astrophysical maser sources and their use as astronomical tools.
In this IAU Symposium on Wolf--Rayet stars, binary aspects received ample

attention, notably because of the recognition that many observations of spectral and photometric variability at all accessible wavelengths are related to colliding winds or other forms of wind interaction. The basic structure of the conference and its proceedings is basic parameters and general properties of WR stars; state of the art model atmospheres for WR stars, anisotropic mass loss and disk formation of WR stars, properties of WR binaries; influence of stellar winds on mass transfer in hot massive binary evolution; dust formation near WR stars and other circumstellar phenomena; and hydrodynamics and high-energy physics of colliding winds in WR+O binaries and of WR winds interacting with compact objects. Within this framework 20 invited reviews, 38 invited oral contributions, and 76 poster papers were presented at the Symposium, entertaining 111 astronomers from 24 countries. These proceedings provide up-to-date information on all aspects of Wolf--Rayet atmospheres, binaries, and colliding winds.

The challenges facing submarine mass movement researchers and engineers are plentiful and exciting. This book follows several high-profile submarine landslide disasters that have reached the world’s attention over the past few years. For decades, researchers have been mapping the world’s mass movements. Their significant impacts on the Earth by distributing sediment on phenomenal scales is undeniable. Their importance in the origins of buried resources has long been understood. Their hazard potential ranges from damaging to apocalyptic, frequently damaging local infrastructure and sometimes devastating whole coastlines. Moving beyond mapping advances, the subaqueous mass movement scientists and practitioners are now also focussed on assessing the consequences of mass movements, and the measurement and modelling of events, hazard analysis and mitigation. Many state-of-the-art examples are provided in this book, which is produced under the auspices of the United Nations Educational, Scientific and Cultural Organisation Program S4SLIDE (Significance of Modern and Ancient Submarine Slope LandSLIDEs).

Written by clinicians, for clinicians, Cardiovascular Medicine and Surgery offers a comprehensive, authoritative, and multidisciplinary approach to this rapidly evolving field. Covering every area relevant to the daily practice of cardiovascular medicine, this new and innovative reference text, led by Drs. Debabrata Mukherjee and Richard A. Lange, brings together a stellar team of cardiovascular specialists from leading medical centers worldwide who focus on cutting-edge strategies for the clinical and surgical management of patients. Both medicine and surgery are highlighted in chapters along with follow-up care and changing technology to equip the clinician for optimal patient care. Highly structured and templated chapters cover pathogenesis, diagnosis, management, special considerations/limitations, follow-up care, and on-going and future research.