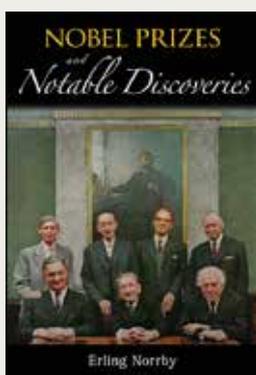


Brief Newsletter from World Scientific

August 2016

Advance Praise by Nobel Laureates for Nobel Prizes and Notable Discoveries

Edited by: **Erling Norrby**
(The Royal Swedish Academy of Sciences, Sweden)



"Norrby reveals in fascinating and scholarly detail the recently released controversial nominations and intense committee discussions of eight different Nobel prizes, including the 1963 prize to Eccles, Hodgkin and Huxley (ionic control of nerve impulses), the 1964 prize to Bloch and Lynen (synthesis of cholesterol), and the 1965 prize to Jacob, Lwoff and Monod (gene regulation)."

Joseph I. Goldstein
Nobel Laureate in Physiology or Medicine, 1985

"In the current volume Norrby covers not only the major prizes in Neuroscience given in the 1960s, but he also traces the history of neuroscience from its onset to almost the present day. This is an extraordinary contribution to the Nobel Prize and to the intellectual history of modern biological science."

Eric Kandel
Nobel Laureate in Physiology or Medicine, 2000

"It is a scientific whodunit, explaining the relative contributions of many great chemists and biologists, not only those who won the Prize, but also the brilliant and important contributors who did not. For sheer readability and entertainment, there is no other book on science quite like it."

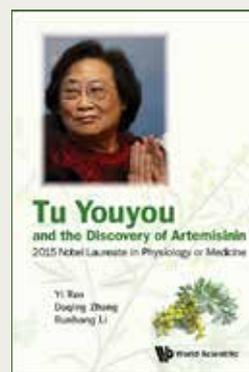
Roger Kornberg
Nobel Laureate in Chemistry, 2006

Advance orders may be placed on World Scientific Online at
<http://www.worldscientific.com/worldscibooks/10.1142/10156>



2015 Nobel Laureate in Physiology or Medicine Tu Youyou and the Discovery of Artemisinin

Edited by: **Yi Rao** (Peking University, China), **Daqing Zhang** (Peking University, China), **Runhong Li** (Peking University, China)



World Scientific Publishing is proud to present *Tu Youyou and the Discovery of Artemisinin*, a book chronicling the works of 2015 Nobel Laureate in Physiology or Medicine, Tu Youyou. This volume traces the path of discovery beginning with Chairman Mao's 1964 instructions to Chinese researchers to find a cure for malaria, a disease that plagued the military and civilians in endemic regions. Through chronicles of the years of painstaking research in the effort to find effective anti-malarial drugs, it shows how an entry in a collection of traditional Chinese medicine prescriptions gave Tu Youyou the clue which led her to the successful extraction of artemisinin from the plant, *Artemisia annua*.

Gathering information from a variety of sources including first-hand accounts, this book describes the contributions of the various organisations, scientists, doctors and countless others who played a part in the process of discovery and clinical testing. In the process, it provides insights into the challenges of carrying out such an extensive research project with limited resources during the tumultuous Cultural Revolution. Included in this book is a translation of Professor Tu Youyou's 2015 Nobel Lecture.

Advance orders may be placed on World Scientific Online at
<http://www.worldscientific.com/worldscibooks/10.1142/10040>



World Scientific Group MD Delivers Speech on Publishing on Invitation of the Royal Swedish Academy of Sciences



Back row left to right: **Prof Stefan Krauss** (Department of Microbiology, Oslo University Hospital, Norway), **Prof Igor Emri** (Chair, Science Europe's Scientific Advisory Committee), **Prof Lars Kloo** (Secretary General, Natural and Engineering Sciences of the Swedish Research Council), **Prof Michael Khor** (Director, Research Support Office and Bibliometrics Analysis, Nanyang Technological University), **Prof Pernilla Wittung-Staishede** (Royal Swedish Academy of Sciences), **Prof Bengt Norden** (Chair Professor of Physical Chemistry, Chalmers University of Technology), **Prof Christina Moberg** (President, Royal Academy), **Prof Arne Jarrick** (Centre for Cultural Evolution, Stockholm University), **Prof Lars Brink** (Professor Emeritus, Dept of Physics, Chalmers University of Technology) Front row left to right: **Ms Doreen Liu** (Group Managing Director, World Scientific Publishing), **Prof K K Phua** (Chairman, World Scientific Publishing)

Photo taken in the Alfred Nobel Room

At a recent mini workshop held in Stockholm, distinguished members of the academic community and executive members of World Scientific Publishing had the opportunity to discuss certain issues related to the Open Access Model. The following extracts are from a speech delivered by Ms Doreen Liu, Group Managing Director of World Scientific Publishing, on some of the issues relating to current problems in Open Access publishing.

Open Access

Open access refers to a published work that is free of restrictions for access online and free of restrictions for use. It started with the noble objective of wanting to widely disseminate scientific and medical research globally so as to benefit mankind and to speed up both scientific and medical research.

Problems of the Current Open Access Model

Many publishers, including some major publishers, see OA journals as opportunities to make more money. As a result, many fully OA journals, including some mega journals, are simply collections of substandard or out-of-scope articles.

To make matters worse, many predatory publishers suddenly entered the market to make a quick buck. The number of such publishing houses has increased 50-fold in 5 years, from 18 in 2011 to 923 in 2016.

Academic Performance Evaluation

At the moment, academic performance of researchers is based on quantitative criteria, such as the number of articles published in SCI-indexed journals. This drives researchers to focus on article count rather than quality. This higher volume of publication increases costs but does not necessarily result in a corresponding improvement in quality.

We believe that there is an over-inflation of impact factors (IF). . . . There are ways to manipulate the IF and some authors and publishers have practised that.

Reviewers

Scientific publishing is valuable only because all that has been published was peer-reviewed. These independent reviewers ensure that what is published is objective and this concept of

Company News

peer reviews has worked for a long time. The only problem is that reviewers' contributions have not been fully recognised.

Our Views

We at World Scientific feel that OA, whether fully gold or hybrid, is a good complementary publishing model. But for the model to work,

1. the articles must still be reviewed,
2. journals must publish good quality papers,
3. journals have to be backed by strong editorial boards

We feel that the best solution to the current problem in publishing is to turn most subscription journals into hybrid OA journals. Let the market find its own levels. Gradually, more and more articles in subscription journals will be open access. The subscription price will go lower or be maintained at a certain

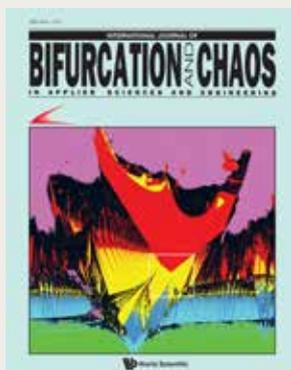
level. This ensures a healthy publishing environment and keeps predatory publishers at bay. Those articles that are not gold OA can follow the green OA route, but the embargo period cannot be too short as that will harm most scientific publishing houses, including very reputable ones. Publishers and editors are professionals just like doctors, accountants, lawyers and engineers, and they provide very valuable services to the community. Do we want to jeopardise the whole industry and put the livelihood of editors at risk?

For the original speech, please refer to

<http://www.worldscientific.com/doi/story/10.1142/news.2016.08.14.226>



World Scientific Journal Ranks Among the Top in International Journal Ranking



World Scientific Publishing's *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering* was ranked 6th, behind *Nature*, *Science* and others, in the Multidisciplinary category by Scimago Journal & Country Rank. A publicly available portal that includes journals and country scientific indicators developed from the information contained in the Scopus database, the indicators developed by Scimago are used to assess and analyze scientific domains. Using citation data drawn from over 21,500 titles from more than 5,000 international publishers and country performance metrics from 239 countries, the Scimago Journal Rank (SJR) indicator shows the visibility of the journals contained in the Scopus database from 1996.

For a limited time only, World Scientific is offering free access to the following articles from IJBC:

Advances in Shell Buckling: Theory and Experiments

J. Michael T. Thompson

<http://www.worldscientific.com/doi/abs/10.1142/S0218127415300013>



New Chaotic Regimes in the Lorenz and Chen Systems

J. C. Sprott

<http://www.worldscientific.com/doi/abs/10.1142/S0218127415500339>



Oscillator Made of Only One Memristor and One Battery

Maheshwar P.D. Sah, Zubaer Ibna Mannan, Hyongsuk Kim, Leon Chua

<http://www.worldscientific.com/doi/abs/10.1142/S0218127415300104>



The Many Facets of Chaos

Evelyn Sander, James A. Yorke

<http://www.worldscientific.com/doi/abs/10.1142/S0218127415300116>



A New Reliable Numerical Method for Computing Chaotic Solutions of Dynamical Systems: The Chen Attractor Case

René Lozi, Alexander N. Pchelintsev

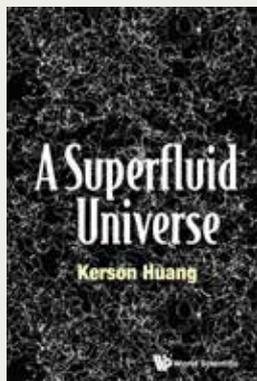
<http://www.worldscientific.com/doi/abs/10.1142/S0218127415501874>



New Physics Books

A Superfluid Universe

By: **Kerson Huang** (MIT)



Written by Professor Emeritus of Physics at MIT, Kerson Huang, *A Superfluid Universe* provides the physical and mathematical background for a theory describing the universe as a quantum superfluid, and explains how dark energy and dark matter arise. Key concepts in each field are introduced as a novel theory spanning many different fields in physics is presented.

Readers should not be discouraged since only the rudiments of condensed matter physics, quantum field theory and general relativity are required to explore this fascinating new model of dark matter and dark energy as facets of a cosmic superfluid.

<http://www.worldscientific.com/worldscibooks/10.1142/10249>



Also by Kerson Huang:

Quarks, Leptons and Gauge Fields

(2nd Edition) (Oct 1992)

<http://www.worldscientific.com/worldscibooks/10.1142/1409>



Lectures on Statistical Physics and Protein Folding

(May 2005)

<http://www.worldscientific.com/worldscibooks/10.1142/5741>



Fundamental Forces of Nature

The Story of Gauge Fields

(May 2007)

<http://www.worldscientific.com/worldscibooks/10.1142/6447>



I Ching

The Oracle

(Revised Edition) (May 2014)

<http://www.worldscientific.com/worldscibooks/10.1142/8891>

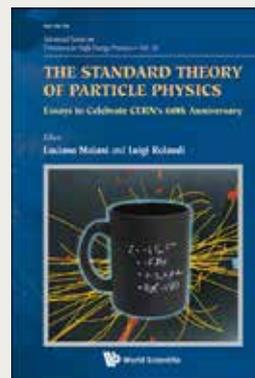


New Open Access Title from CERN

The Standard Theory of Particle Physics

Essays to Celebrate CERN's 60th Anniversary

Edited by: **Luciano Maiani** (INFN, Italy & University of Rome, Italy),
Luigi Rolandi (CERN, Switzerland & Scuola Normale Superiore di Pisa, Italy)



Presenting a complete and up-to-date picture of the Standard Theory with the added element of a historical perspective, this book is a must read for all interested in this pillar of particle physics. Comprising a collection of articles written by protagonists in the field of particle physics, theoretical developments are explored together with current experimental tests, including the discovery of the Higgs Boson and the measurement of its mass as well as the most precise measurements of the top mass. As a volume in the Advanced Series on Directions in High Energy Physics, this is a comprehensive description of our present understanding of particle physics.

Start reading this book under World Scientific's Open Access Programme!

<http://www.worldscientific.com/worldscibooks/10.1142/9878>



Other Open Access Titles from CERN:

60 Years of CERN Experiments and Discoveries

(Sep 2015)

<http://www.worldscientific.com/worldscibooks/10.1142/9441>



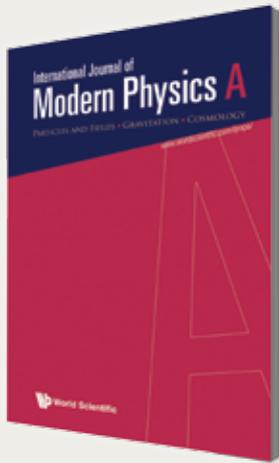
The High Luminosity Large Hadron Collider

The New Machine for Illuminating the Mysteries of Universe
(Oct 2015)

<http://www.worldscientific.com/worldscibooks/10.1142/9581>



World Scientific Offers FREE ACCESS to Recent Articles Published by Nobel Laureates and Renowned Physicists



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International Journal of Modern Physics A (IJMPA)

Particles and Fields; Gravitation; Cosmology

www.worldscientific.com/ijmpa



The Future of Physics — Revisited

C. N. Yang (*Tsinghua University*)
Vol. 30 (2015) 1530049

C. N. Yang on Einstein and Newton (October 2015)
Vol. 30 (2015) 1530064



Quantum Chromodynamics — The perfect Yang–Mills Gauge Field Theories

David Gross (*UC Santa Barbara*)
Vol. 31 (2016) 1630008



Effective Field Theory, Past and Future

Steven Weinberg (*Texas*)
Vol. 31 (2016) 1630007



Imagining the Future, or How the Standard Model May Survive the Attacks

Gerard 't Hooft (*Utrecht University*)
Vol. 31 (2016) 1630022



On the Way from Sakatons to Quarks

L. B. Okun (*ITEP, Moscow*)
Vol. 30 (2015) 1530008



Yoichiro Nambu and the Origin of Mass

Tom W. B. Kibble (*Imperial College*)
Vol. 31 (2016) 1630006



Yang–Mills Theories at High Energy Accelerators

George Sterman (*Stony Brook*)
Vol. 31 (2016) 1630005



A New Storage-Ring Light Source

Alex Chao (*SLAC*)
Vol. 30 (2015) 1530051



Scenario for the Renormalization in the 4D Yang–Mills Theory

L. D. Faddeev (*Steklov Math. Inst., St. Petersburg*)
Vol. 31 (2016) 1630001



Concrete Quarks

George Zweig (*MIT*)
Vol. 30 (2015) 1430073



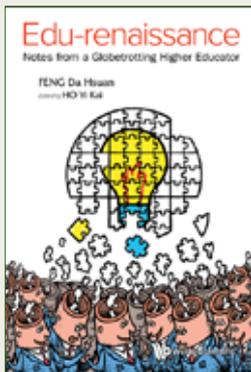
LHCb Detector Performance
The LHCb Collaboration (*CERN*)
Vol. 30 (2015) 1530022

World Scientific Book Event

Top University Dons Grace World Scientific launch of *Edu-Renaissance*



Left to Right: Professor Shih Choon Fong, Former Founding President of the King Abdullah University of Science and Technology, Saudi Arabia (KAUST), and Former President of the National University of Singapore (NUS); Professor Feng Da Hsuan, Director of the Global Affairs Office and Special Advisor to Rector at the University of Macau; Professor Su Guanng, Former President of Nanyang Technological University, Singapore (NTU) at the launch of *Edu-Renaissance: Notes from a Globetrotting Higher Educator*. Photo by World Scientific.



On 4 July, 2016, top university dons, Professor Su Guanng, former President of Nanyang Technological University (NTU); Professor Shih Choon Fong, former Founding President of the King Abdullah University of Science and Technology (KAUST) and Former President of the National University of Singapore (NUS); and award-winning nuclear physicist, Professor Feng Da Hsuan (馮達旋) launched Prof Feng's new book, *Edu-renaissance: Notes from a Globetrotting Higher Educator* at Book Haven in NUS University Town.

The launch saw a full-house crowd, comprising notable academics, educators and students. The dons' speeches addressed topics raised in *Edu-renaissance*, providing much insight into the direction, purpose, foci and future of higher education, particularly in Singapore and Asia.

Lauded by distinguished academics like Prof C. David Naylor (President Emeritus of University of Toronto, Canada), Prof Fu-Jia Yang (Chinese Academy of Sciences, China, former President of Fudan University, China, and former Chancellor of the University of Nottingham, UK), Prof Sung-Mo Steve Jang (President of KAIST, Korea, and Chancellor Emeritus of the University of California, Merced, USA), and Prof Yitzhak Apeloig (Technion President Emeritus, Israel), *Edu-renaissance* lends readers a perspective on the future of higher education through Prof Feng's eyes.

"A globetrotter in every sense of the word, DH has traveled widely, encountered a broad spectrum of people, taught in universities as well as served in various capacities in organizations on both sides of the Pacific.

Through the collection of his speeches and essays in his book, DH shares with enthusiasm, passion and perceptiveness his thoughts and insights on higher education and its humanistic dimension. His anecdotes and personal experiences in higher education across the globe make compelling reading, more so when one needs to chew on his message in each article."

- Shih Choon-Fong

<http://www.worldscientific.com/worldscibooks/10.1142/9376>

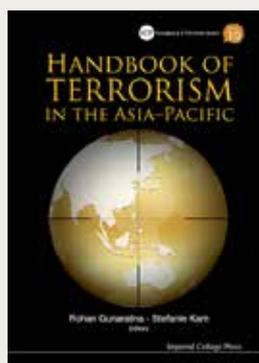


Social Sciences Books

Handbook of Terrorism in the Asia–Pacific

Edited by:

Rohan Gunaratna (*S. Rajaratnam School of International Studies, NTU, Singapore*),
Stefanie Kam (*S. Rajaratnam School of International Studies, NTU, Singapore*)



The Handbook of Terrorism in the Asia–Pacific provides a historical overview of the issue of terrorism in the Asia Pacific, the evolution of threat, and the current threat faced by countries with the rise of the Islamic State (IS). This is a concise and readable handbook which examines the origins of the current wave of terrorism sweeping across countries in Southeast Asia, South Asia, Northeast Asia and the Pacific. By identifying emerging trends and new forms of terror that have altered the landscape and rendered the region increasingly vulnerable to asymmetric attacks, the book establishes itself as an invaluable resource for readers interested in the security issues faced by the region. Comprising more than 20 chapters, this handbook will be a useful source of reference for undergraduate and graduate students seeking to understand the causes of terrorism and insurgency in the Asia Pacific.

Get this latest volume in the Imperial College Press Insurgency and Terrorism Series at World Scientific

<http://www.worldscientific.com/worldscibooks/10.1142/p1093>



Economics of Tobacco Control in China

From Policy Research to Practice

Edited by: **Teh-wei Hu** (*UC Berkeley*)



With nearly 370 million smokers in China, or about one-third of the world's smoking population, the issue is one that is of great concern in terms of medical policy. This book addresses not only why China should raise cigarette tax, but also how it should raise the tobacco tax, by providing decision makers with relevant research findings and quantitative estimate about the impact of raising the tobacco tax. It documents how these research findings were communicated to the Chinese government officials, and how the tobacco tax was raised 10 years after China's ratification of the WHO Frame Work Convention on Tobacco Control Treaty.

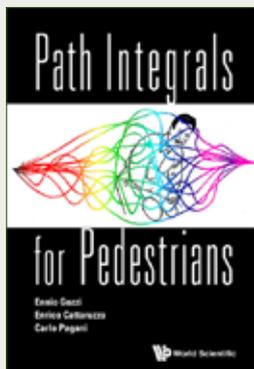
The book discusses the economic consequences of smoking and provides the essential economic analysis of issues related to taxation and public health information upon which the specifics of the taxation policy that is adopted are built. A must read for researchers who are interested in China's tobacco control efforts and how their findings should be communicated to policy makers.

Get this volume in the World Scientific Series in Global Health Economics and Public Policy

<http://www.worldscientific.com/worldscibooks/10.1142/10007>



Book Reviews



Path Integrals for Pedestrians

By: **Ennio Gozzi** (University of Trieste, Italy & INFN, Trieste, Italy), **Enrico Cattaruzza** (INFN, Trieste, Italy),
Carlo Pagani (INFN, Trieste, Italy & University of Mainz, Germany)

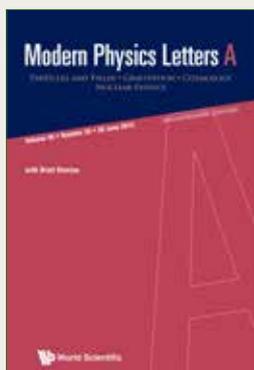
This short book provides a clear, pedagogical and insightful presentation of the subject.

An interesting innovation in this book is that the authors provide a clear presentation of the path integral formulation of the Wigner functions, which are fundamental in the study of quantum statistical mechanics; and, for the first time in an elementary book, the work of Koopman and von Neumann on classical and statistical mechanics.

It will be difficult to find a better and more compact introduction to this fundamental subject.

- CERN Courier

<http://www.worldscientific.com/worldscibooks/10.1142/9183>



Modern Physics Letters A: Special Issue on Hadrontherapy

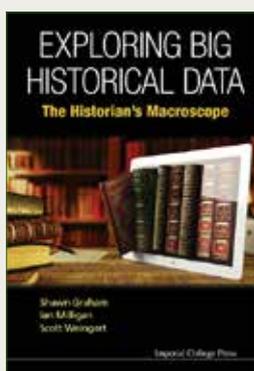
By: **Saverio Braccini** (ed.)

Through 10 invited review papers, the volume presents the basics of hadron therapy, along with the most recent scientific and technological developments in the field.

This volume will be very useful to students, researchers approaching medical physics, and scientists interested in this interdisciplinary and fast-moving field.

- CERN Courier

<http://www.worldscientific.com/toc/mpla/30/17>



Exploring Big Historical Data The Historian's Macroscopic

By: **Shawn Graham** (Carleton University, Canada), **Ian Milligan** (University of Waterloo, Canada),
Scott Weingart (Indiana University, USA)

"This primer offers a fine introduction to big data for the next generation of humanities researchers. Summing Up: Highly recommended."

- Choice

<http://www.worldscientific.com/worldscibooks/10.1142/p981>

