

Brief Newsletter from World Scientific July 2017

World Scientific is proud to present
Stephen Hawking's two Classic Books,
the Big Bang and Black Holes, and *Euclidean Quantum Gravity*

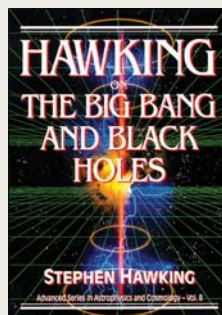
July 2017: Top World Scientific Management Attend Stephen Hawking's 75th Birthday Celebration in Cambridge

Top WSPC management were in attendance at *Gravity and Black Holes*, an international conference held in Cambridge to celebrate the 75th birthday of preeminent theoretical physicist, Professor Stephen Hawking. Chairman, Dr KK Phua, and Group Managing Director, Ms Doreen Liu, were among guests invited to the birthday symposium. The WSPC booth, which showcased Prof Hawking's books as well as related titles, was the sole representative from the publishing industry.

World Scientific is issuing reprints of two of Prof Hawking's high level volumes to celebrate the occasion. These texts represent some of the most important early work of Prof Hawking and underpins much of his subsequent theories.



Prof KK Phua (Chairman) and Doreen Liu (Group MD) of World Scientific at Prof Stephen Hawking's 75th Birthday Party in Cambridge



Hawking on the Big Bang and Black Holes

By: Stephen Hawking (Cambridge)

"It is an excellent thing to have so many of Professor Hawking's most important contributions to the theory of black holes and space-time singularities all collected together in one handy volume. I am very glad to have them."

Roger Penrose
Oxford

<http://www.worldscientific.com/worldscibooks/10.1142/1751>



Euclidean Quantum Gravity

Edited by: G W Gibbons (Cambridge),
S W Hawking (Cambridge)

"... is a collection of fascinating papers which are all of high quality. This book can certainly be recommended to anyone who works in general relativity, and especially in quantum gravity."

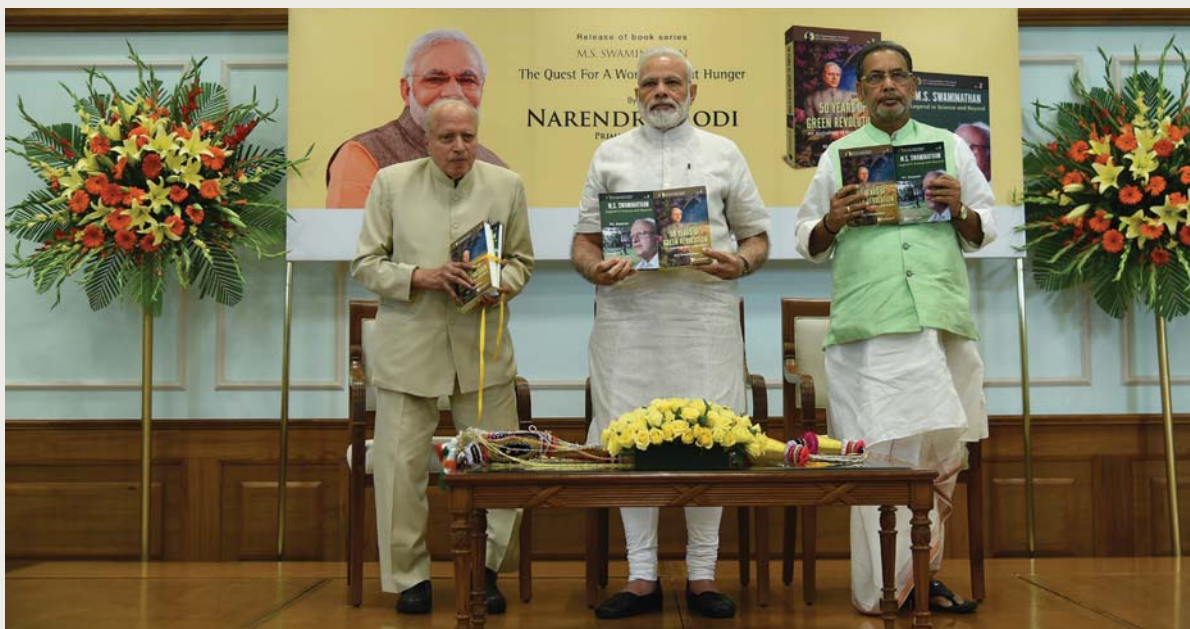
General Relativity and Gravitation

<http://www.worldscientific.com/worldscibooks/10.1142/1301>



World Scientific Launches

Indian Prime Minister Launches World Scientific Book Series by M.S. Swaminathan, the Father of India's Green Revolution



Honourable Prime Minister releasing the two volumes in the World Scientific Series (to his right, Dr M S Swaminathan and to his left Mr Radha Mohan Singh, Hon Minister of Agriculture)



Honourable Prime Minister speaking at the event



Honourable Prime Minister greeting Professor Swaminathan during the event.

Indian Prime Minister, Narendra Modi, launched World Scientific's two-part book series titled 'M.S. Swaminathan: The Quest for a World Without Hunger' in New Delhi recently. Distinguished guests at the event included; Union Minister of Agriculture and Farmers Welfare, Mr Radha Mohan Singh; the Union Ministers for Food Processing and Railways, the Deputy Speaker of the Indian Lok Sabha (Parliament) as well as leading agricultural scientists and heads of Indian research and educational institutions.

The two volumes bring out the remarkable transformation of Indian agriculture. The first book '50 Years of Green Revolution' is a compilation of selected scientific and popular papers on the green revolution and related topics by M.S. Swaminathan. The second, titled 'M.S. Swaminathan: A Legend in Science and Beyond', is a biography of M.S. Swaminathan. A unique record of his pioneering contributions to basic sciences, the book deals with areas such as cytogenetics, ionizing radiation and applied genetics.

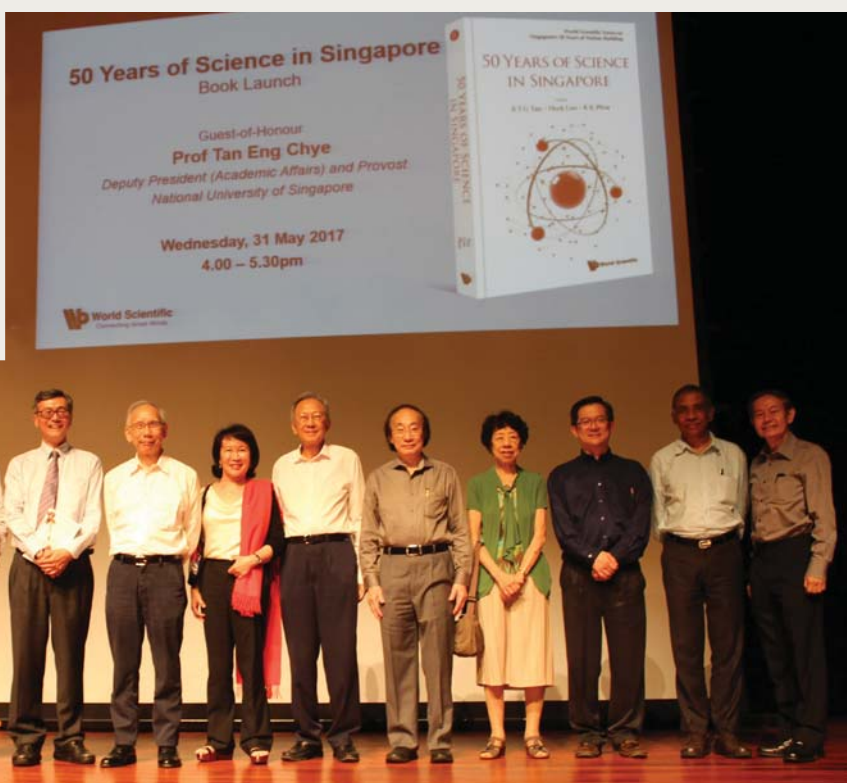
Praising the dedication and commitment of Prof. Swaminathan, Prime Minister Modi described him as a "Kisan Vaigyanik" — Farmers' Scientist — rather than just a "Krishi Vaigyanik" — Agricultural Scientist. The Prime Minister also commented that Prof. Swaminathan's specialty is that his work has been grounded in practical reality.

For more information on the event and the books, please click on the following URL:
<http://www.worldscientific.com/doi/story/10.1142/news.2017.05.23.250>

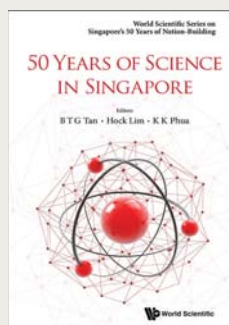


World Scientific Launches

50 Years of Science in Singapore



Top Corner: World Scientific Editor-in-Chief Dr KK Phua presenting Guest-of-Honour Prof Tan Eng Chye with a copy of *50 Years of Science in Singapore*
Bottom: Contributors, editors and World Scientific management celebrating the launch of *50 Years of Science in Singapore*



50 Years of Science in Singapore, the final volume of World Scientific's 50 Years series, was launched at a ceremony attended by many notable members of the scientific community.

Professor Tan Eng Chye, Deputy President (Academic Affairs) and Provost at the National University of Singapore, was guest of honour and noted in his speech the pivotal role played by science in building the nation of Singapore. Co-editors Professor Bernard Tan Tiong Gie, Professor Lim Hock and Dr Phua Kok Khoo were on hand to recount the efforts that went into the production of a book which recorded the scientific milestones achieved over the course of the last 50 years. The stories in *50 Years of Science in Singapore* span a wide range of contributors who have shaped Singapore's science and technology scene.

Many of the chapters in the book were penned by authors who were personally and intimately involved in the journey undertaken by the nation's scientific community. They included CEO of the National Research Foundation (NRF), Prime Minister's Office, Singapore, Dr Low Teck Seng; current Chief Executive at the Science Centre Singapore, Dr Lim Tit Meng; Provost's Chair of Physics, and Vice President (University and Global Relations), NUS Andrew T S Wee; Director of the Institute for Mathematical Sciences and University Professor at the Department of Mathematics, NUS, Prof Chong Chi Tat; Head and Professor of the Department of Chemistry, Dr Richard MW Wong; Distinguished Professor and Head of the Department of Biological Sciences, Prof Paul Matsudaira, among others.

Max Phua, Managing Director of World Scientific Publishing, concurs, "Without the hard work and perseverance of the contributors/editors of this book, who had contributed significantly to the development of science and technology in Singapore, our STEM scene and the nation at large would not be what it is today. World Scientific is proud to be a part of the effort to recognise and record these milestones in *50 Years of Science in Singapore*."

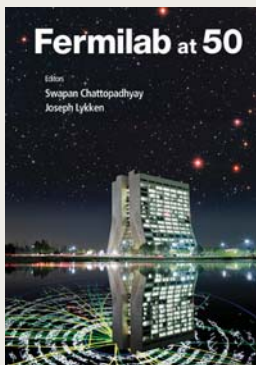
Readers interested in obtaining a copy of *50 Years of Science in Singapore* are encouraged to visit the URL below <http://www.worldscientific.com/worldscibooks/10.1142/10057>

An interview with the book's editors is accessible via the following link <http://www.channelnewsasia.com/news/catch-up-tv/first-look-asia/tech/fla-170620-science-8960778>



Physics Books

Fermilab at 50



Edited by: **Swapan Chattopadhyay** (Northern Illinois University, USA & Fermilab), **Joseph Lykken** (Fermilab)

In this commemorative volume, scientific leaders from around the world celebrate Fermilab's 50th anniversary with thoughts on the laboratory's past, present and future. The list of contributors include Norm Augustine, the ex-CEO of Lockheed Martin, Fabiola Gianotti, the Director-General of CERN, and Nobel laureates T. D. Lee, Art McDonald, Burton Richter and Jack Steinberger among others. A necessary read for academics and readers interested in particle physics.

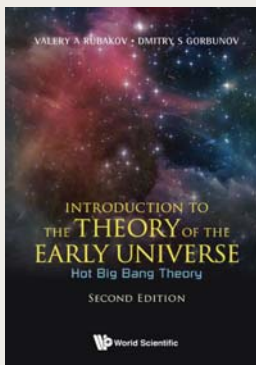
"In the last 50 years, Fermilab has been true to this legacy that continues to inspire, shape and enrich the lives of countless young scientists resulting in such world-class fundamental discoveries as the bottom quark, the top quark and the tau neutrino."

T. D. Lee
Nobel Laureate

<http://www.worldscientific.com/worldscibooks/10.1142/10637>



Introduction to the Theory of the Early Universe Hot Big Bang Theory (2nd Edition)



By: **Valery A Rubakov** (Russian Academy of Sciences, Russia & Moscow State University, Russia),
Dmitry S Gorbunov (Russian Academy of Sciences, Russia)

Written from the viewpoint that a deep connection exists between cosmology and particle physics, the book presents ideas on both the homogeneous and isotropic Universe at the hot stage of its evolution and in later stages.

As particle physics and cosmology underwent rapid development between the first and second editions of this book, the second edition has many chapters and sections which have been revised, while numerical values of particle physics and cosmological parameters have been updated.

Essential materials from General Relativity and the theory of elementary particles are collected in the appendices to save readers the trouble of having to constantly consult other texts. Essential reading for students and researchers interested in cosmology and particle physics.

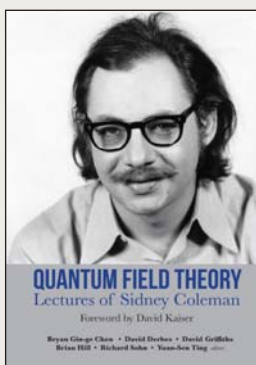
<http://www.worldscientific.com/worldscibooks/10.1142/10447>



Lectures of Sidney Coleman on Quantum Field Theory

Foreword by David Kaiser

Edited by: **Bryan Gin-gu Chen** (Leiden University, Netherlands), **David Derbes** (University of Chicago, USA), **David Griffiths** (Reed College, USA), **Brian Hill** (Saint Mary's College of California, USA), **Richard Sohn** (Kronos, Inc., Lowell, USA), **Yuan-Sen Ting** (Harvard)



Considered an authoritative figure on quantum field theory, Sidney Coleman is largely unknown outside of the theoretical physics community, and known only by reputation to the younger generation. An unusually effective teacher, he was famed for his wit, insight and encyclopedic knowledge of the field to which he made many important contributions.

The immediacy of Professor Coleman's approach and his ability to present an argument simply without sacrificing rigor makes his book easy to read and ideal for the student. Part of the motivation in producing this book is to leave a record of the work of this outstanding physicist for later generations.

A must read for graduate students and academics interested in quantum field theory. Readers are advised to place advanced orders for this classic in the making via WSPC Online:

<http://www.worldscientific.com/worldscibooks/10.1142/9371>

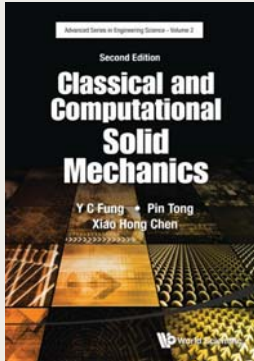


Engineering and Social Science Books

Advanced Series in Engineering Science - Volume 2

Classical and Computational Solid Mechanics (2nd Edition)

By: **Y C Fung** (*UC San Diego*), **Pin Tong** (*UC San Diego & Hong Kong University of Science and Technology, Hong Kong*), **Xiaohong Chen** (*UTC Aerospace Systems, USA*)



This second edition of the best-selling volume provides an update on recent developments in classical and computational solid mechanics. The new edition includes five new areas: Fundamental Principles of Thermodynamics and Coupled Thermoelastic Constitutive Equations at Large Deformations, Functional Thermodynamics and Thermo-viscoelasticity, Thermodynamics with Internal State Variables and Thermo-Elasto-Viscoplasticity, Electro-Thermo-Viscoelasticity/Viscoplasticity, and Meshless Method. These new topics are self-contained sections or chapters and cover areas often neglected by existing rival publications.

Written for engineers and engineering scientists in a style that is readable, precise, concise, and practical, the volume gives priority to the formulation of problems, presenting the classical results as the gold standard, and the numerical approach as a tool for obtaining solutions.

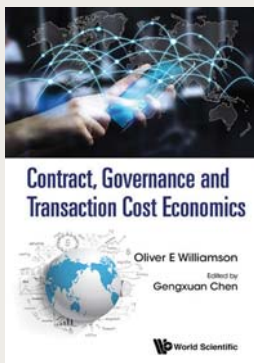
<http://www.worldscientific.com/worldscibooks/10.1142/9744>



Contract, Governance and Transaction Cost Economics

By: **Oliver E Williamson** (*UC Berkeley, Nobel laureate*)

Edited by: **Gengxuan Chen** (*Contract and Economic Organization Research Center, Sichuan Academy of Social Sciences & UC Berkeley*)



A collection of seven papers on Transaction Cost Economics by Nobel laureate, Professor Oliver E Williamson, this volume examines the extensive applications of Transaction Cost Economics. Ranging from the field of industrial organization to strategy and organizational behaviour among others, the scope of this book bears testimony to Williamson's view that "any problem that originates as or can be reformulated as a contracting problem can be examined to advantage in transaction cost economizing terms."

Editor of the volume, Gengxuan Chen, helps bring into perspective the benefits that will accrue to China through the introduction of Transaction Cost Economics. The volume is expected to provide great insight for scholars interested in the practices of the Chinese market economy.

<http://www.worldscientific.com/worldscibooks/10.1142/10316>



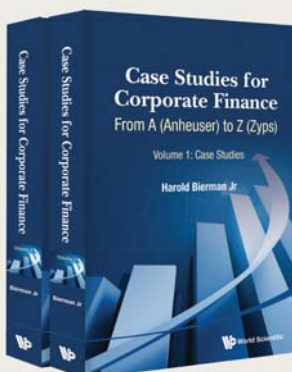
Case Studies for Corporate Finance

From A (Anheuser) to Z (Zypps) (In 2 Volumes)

Volume 1: Case Studies

Volume 2: Solutions

By: **Harold Bierman Jr** (*Cornell*)



A distinctive collection of 51 real business cases dealing with corporate finance issues over the period of 1985–2014, *Case Studies for Corporate Finance: From A (Anheuser) to Z (Zypps)* is the latest work of Harold Bierman Jr, a world-renowned author in the field of corporate finance. Covering a wide span of different areas of finance, ranging from capital structures to leveraged buy-outs and restructuring, the collection has a US-centric focus but does not neglect other parts of the world.

Particularly notable features are questions in Volume 1 and the unique solutions to those questions offered in Volume 2, all of which aim to provide the reader with the simulated experience of real business situations involving corporate financial decision-making.

<http://www.worldscientific.com/worldscibooks/10.1142/9550>



World Scientific Announces New Journal

China and the World Ancient and Modern Silk Road 古代与现代丝绸之路

NEW INTERNATIONAL JOURNAL

Executive Editors

KK Phua

*Director of Institute of Advanced Studies
Nanyang Technological University*

Feng Da Hsuan

*Director of Global Affairs and Special Advisor to Rector
University of Macau
Former Vice President of University of Texas at Dallas*

Advisors

Zheng Yong Nian

Professor and Director, East Asian Institute, National University of Singapore

Shih Choon Fong

*Founding President of the King Abdullah University of Science and Technology
Former President of the National University of Singapore*

Kevin O'Brien

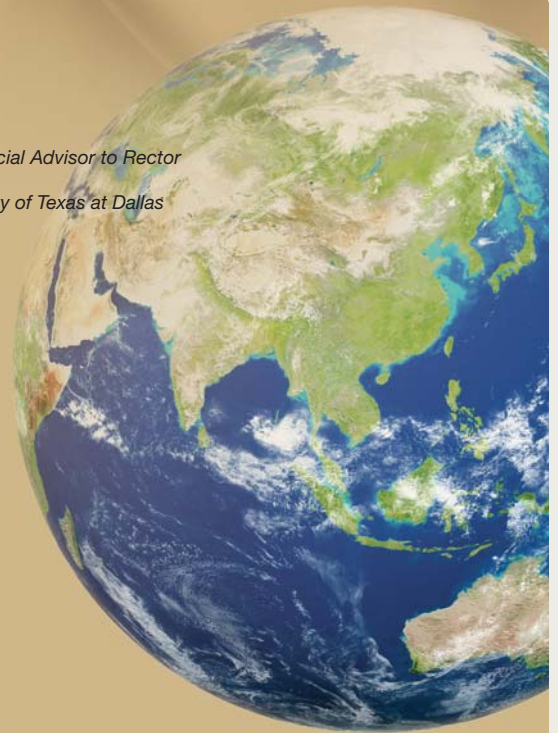
Director of the Institute of East Asian Studies, University of California, Berkeley

Michael Szonyi

Director, Fairbank Center for Chinese Studies, Harvard University

Tan Eng Chye

Deputy President (Academic Affairs) and Provost, National University of Singapore



Editorial board members

Belal E Baaquie

Professor, International Center for Education in Islamic Finance Malaysia

B.R. Deepak

*Professor of Chinese and China Studies, Centre of Chinese and Southeast Asian Studies,
Jawaharlal Nehru University*

Toh Han Shih

Former journalist, South China Morning Post

Jean-Paul Larcon

Professor Emeritus, HEC Paris

Low Hwee Boon

Institute of Advanced Studies, Nanyang Technological University

Chen Gang

Senior Research Fellow, East Asian Institute, National University of Singapore

Yu Hong

*Senior Research Fellow, East Asian Institute,
National University of Singapore*

Liang Hai Ming

*Chairman and Chief Economist, China Silk Road Valley Research Institute,
People's Republic of China*

Sabine Lee

Professor in Modern History, University of Birmingham

Geneviève Barré*

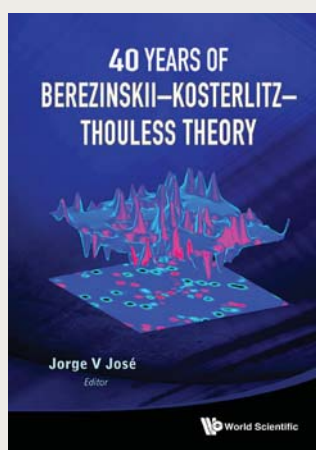
*Director, Political & Economic Department,
Asia-Europe Foundation, HEC Paris*

and others...

Company News

Early seminal work by 2016 Nobel Laureates J Michael Kosterlitz and David J Thouless featured in the 2013 book, “40 Years of Berezinskii-Kosterlitz-Thouless Theory” published by World Scientific

Editor of the book, Jorge V José, co-organized a recent high level Topological Phase Transition workshop in Singapore



2016 Nobel Physics Prize Winner and contributor of *40 Years of Berezinskii-Kosterlitz-Thouless Theory*, J. Michael Kosterlitz (left), takes a photo with the editor of the volume, Professor Jorge V José (right)

A recent high level topological phase transitions workshop held at the Institute of Advanced Studies, Nanyang Technological University, Singapore, featured a selection of World Scientific’s publications in physics and mathematics. Among the books featured, *40 Years of Berezinskii-Kosterlitz-Thouless Theory*, which included contributions from J M Kosterlitz and D J Thouless, whose editor, Jorge V José, was a speaker at the workshop, was very well-received at the workshop.

The large number of international researchers in attendance reflected the wide applications of topological phase transitions for condensed matter physics, quantum materials and simulations, high energy physics and string theory among others. The presence and active participation of two 2016 Physics Nobel laureates, F. Duncan M. Haldane and J. Michael Kosterlitz, lent further prestige to the event.

For more information on the *40 Years of Berezinskii-Kosterlitz-Thouless Theory*, readers are encouraged to visit the associated webpage: <http://www.worldscientific.com/worldscibooks/10.1142/8572>



WSPC book wins Singapore 2017 Best Book Cover Design Award



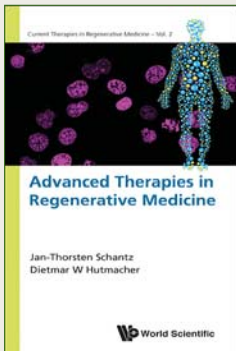
WSPC’s Global Publishing has clinched the 2017 Singapore Book Awards Best Book Cover Design Award. Organised by the Singapore Book Publishers Association (SPBA), the Singapore Book Awards is an industry award for books published in Singapore which celebrates the achievements of the local publishing industry.

Global Publishing’s 扬声堂 (*Speaker’s Hall*) won over the judges with a “book cover design concept (which) enhances the author’s relentless efforts and unwavering belief in preserving the culture of one’s mother tongue”. Judges praised the “strategic usage of the 9-grid square” which added depth and helped to engage readers with a puzzle to be solved.

For more information on the book, readers are encouraged to visit the associated webpage: <http://www.worldscientific.com/worldscibooks/10.1142/g370>



Book Reviews



Current Therapies in Regenerative Medicine: Volume 2

Advanced Therapies in Regenerative Medicine

By: **Jan-Thorsten Schantz** (Technische Universität München, Munich, Germany),

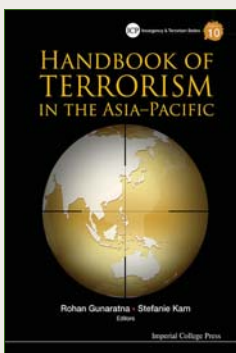
Dietmar W Huttmacher (Queensland University of Technology, Australia & Technische Universität München, Garching, Germany)

"This publication gives a good overview of the interface between basic research and possible clinical applications as well as their implementation in everyday clinical practice. It is well-suited as an introduction into the complex field of regenerative medicine - for basic researcher as well as clinician-scientists."

Prof. Dr. Raymund E. Horch, Erlangen

"Plastische Chirurgie", Journal of the German Society of Plastic, Reconstructive and Aesthetic Surgeons, 17th Volume, Issue 1/17

<http://www.worldscientific.com/worldscibooks/10.1142/9349>



Insurgency and Terrorism Series: Volume 10

Handbook of Terrorism in the Asia-Pacific

Edited by: **Rohan Gunaratna** (S. Rajaratnam School of International Studies, NTU, Singapore),

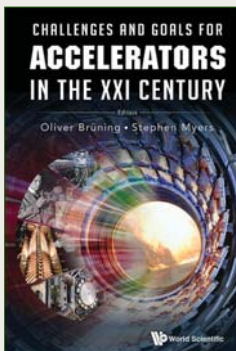
Stefanie Kam (S. Rajaratnam School of International Studies, NTU, Singapore)

"This is where the Handbook of terrorism in the Asia-Pacific will prove an essential companion for counter-terrorism experts across the region, providing accurate context against which they can understand and deal with the problem of terrorism on both a national and a cooperative regional basis. Its authors and contributors are to be commended for their comprehensive and intelligent contribution."

David Irvine

Former Director General of the Australian Secret Intelligence Service (2003–2009) and Australian Security Intelligence Organisation (2009–2014) Journal of Policing, Intelligence and Counter Terrorism, 2017 VOL. 12, NO. 1

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



Challenges and Goals for Accelerators in the XXI Century

Edited by: **Oliver Brüning** (CERN), **Stephen Myers** (CERN)

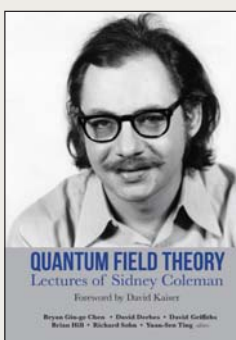
"Owing to the expertise and international reputations of the authors of the individual chapters, few if any other books in this field have managed to summarise such a broad topic with such authority."

Many of its chapters could also be formative for young people thinking of joining one of the described projects. I am convinced that these readers will receive the book very positively."

Ugo Amaldi

TERA Foundation, CERN Courier

<http://www.worldscientific.com/worldscibooks/10.1142/8635>



Lectures of Sidney Coleman on Quantum Field Theory

Foreword by David Kaiser

Edited by: **Bryan Gin-ge Chen** (Leiden University, Netherlands), **David Derbes** (University of Chicago, USA), **David Griffiths** (Reed College, USA), **Brian Hill** (Saint Mary's College of California, USA), **Richard Sohn** (Kronos, Inc., Lowell, USA), **Yuan-Sen Ting** (Harvard)

"Sidney Coleman was the master teacher of quantum field theory. All of us who knew him became his students and disciples. Sidney's legendary course remains fresh and bracing, because he chose his topics with a sure feel for the essential, and treated them with elegant economy."

Frank Wilczek

Herman Feshbach Professor of Physics
MIT

<http://www.worldscientific.com/worldscibooks/10.1142/9371>

