

# 【March/April 2016 注目の近刊・新刊書ご案内】

– 自然科学・理工学・数学 –

【動植物・園芸・農林・畜産・水産】

静寂の閃光：蛍の魅惑の世界

## **Silent Sparks: The Wondrous World of Fireflies**

Lewis, Sara

(Princeton U.P.)

2016:05 240 Hardback 9780691162683 ¥3,830

In *Silent Sparks*, noted biologist and firefly expert Sara Lewis dives into the fascinating world of fireflies and reveals the most up-to-date discoveries about these beloved insects. From the meadows of New England and the hills of the Great Smoky Mountains, to the rivers of Japan and mangrove forests of Malaysia, this beautifully illustrated and accessible book uncovers the remarkable, dramatic stories of birth, courtship, romance, sex, deceit, poison, and death among fireflies.

【天文学・宇宙科学】

簡説・天体物理学 第二版

## **Astrophysics in a Nutshell. 2nd ed**

Maoz, Dan

*In a Nutshell* (Princeton U.P.)

2016:03 312 p. Hardback 9780691164793 ¥10,880

Winner of the American Astronomical Society's Chambliss Award, *Astrophysics in a Nutshell* has become the text of choice in astrophysics courses for science majors at top universities in North America and beyond. In this expanded and fully updated second edition, the book gets even better, with a new chapter on extrasolar planets; a greatly expanded chapter on the interstellar medium; fully updated facts and figures on all subjects, from the observed properties of white dwarfs to the latest results from precision cosmology; and additional instructive problem sets.

【物理学】

《In a Nutshell シリーズ新刊》 最新古典物理学

## **Modern Classical Physics: Optics, Fluids, Plasmas, Elasticity, Relativity, and Statistical Physics**

Blandford, Roger D. & Thorne, Kip S.

(Princeton U.P.)

2016:05 1024 p. Hardback 9780691159027 ¥12,740

This first-year, graduate-level text and reference book covers the fundamental concepts and twenty-first-century applications of six major areas of classical physics that every masters- or PhD-level physicist should be exposed to, but often isn't: statistical physics, optics (waves of all sorts), elastodynamics, fluid mechanics, plasma physics, and special and general relativity and cosmology. Growing out of a full-year course that the eminent researchers Kip Thorne and Roger Blandford taught at Caltech for almost three decades, this book is designed to broaden the training of physicists. Its six main topical sections are also designed so they can be used in separate courses, and the book provides an invaluable reference for researchers.

【数学】

《Mathematical Notes シリーズ新刊》

## **Complex Ball Quotients and Line Arrangements in the Projective Plane**

◇ 円価格は洋書取扱書店にお問い合わせください ◇ 出版時期・価格は変更されることがあります ◇ 御注文の際は ISBN を併せてお知らせください

Tretkoff, Paula

*Mathematical Notes* (Princeton U.P.)

2016:03 215 p. Paperback 9780691144771 ¥9,600

This book introduces the theory of complex surfaces through a comprehensive look at finite covers of the projective plane branched along line arrangements. Paula Tretkoff emphasizes those finite covers that are free quotients of the complex two-dimensional ball. Tretkoff also includes background on the classical Gauss hypergeometric function of one variable, and a chapter on the Appell two-variable  $F_1$  hypergeometric function.

【数学】

《Annals of Mathematics Studies シリーズ新刊》

### **Fourier Restriction for Hypersurfaces in Three Dimensions and Newton Polyhedra**

Ikromov, Isroil A. & Miller, Detlef

*Annals of Mathematics Studies, 194* (Princeton U.P.)

2016:06 312 p. Hardback 9780691170541 ¥21,120 Paperback 9780691170558 ¥9,600

This is the first book to present a complete characterization of Stein-Tomas type Fourier restriction estimates for large classes of smooth hypersurfaces in three dimensions, including all real-analytic hypersurfaces. The range of Lebesgue spaces for which these estimates are valid is described in terms of Newton polyhedra associated to the given surface.

【数学】

《In a Nutshell シリーズ新刊》 物理学者のための簡明・群論

### **Group Theory in a Nutshell for Physicists**

Zee, Anthony

*In a Nutshell* (Princeton U.P.)

2016:03 584 p. Hardback 9780691162690 ¥11,520

Although group theory is a mathematical subject, it is indispensable to many areas of modern theoretical physics, from atomic physics to condensed matter physics, particle physics to string theory. In particular, it is essential for an understanding of the fundamental forces. Yet until now, what has been missing is a modern, accessible, and self-contained textbook on the subject written especially for physicists. *Group Theory in a Nutshell for Physicists* fills this gap, providing a user-friendly and classroom-tested text that focuses on those aspects of group theory physicists most need to know.

【数学】

《Annals of Mathematics Studies シリーズ新刊》

### **Non-Archimedean Tame Topology and Stably Dominated Types**

Hrushovski, Ehud & Loeser, Francois

*Annals of Mathematics Studies, 192* (Princeton U.P.)

2016:03 232 p. Hardback 9780691161686 ¥21,120 Paperback 9780691161693 ¥9,600

This book lays down model-theoretic foundations for non-archimedean geometry. The methods combine o-minimality and stability theory. Definable types play a central role, serving first to define the notion of a point and then properties such as definable compactness.

【数学】

《Annals of Mathematics Studies シリーズ新刊》 辻 雄(東京大学教授)等著

### **The P-Adic Simpson Correspondence**

Abbes, Ahmed et al.

*Annals of Mathematics Studies, 193* (Princeton U.P.)

2016:04 616 p. Hardback 9780691170282 ¥21,120 Paperback 9780691170299 ¥9,600

The p-adic Simpson correspondence, recently initiated by Gerd Faltings, aims at describing all p-adic representations of the fundamental group of a proper smooth variety over a p-adic field in terms of linear algebra—namely Higgs bundles. This book undertakes a systematic development of the theory following two new approaches, one by Ahmed Abbes and Michel Gros, the other by Takeshi Tsuji. The authors mainly focus on generalized representations of the fundamental group that are p-adically close to the trivial representation.

【科学全般】

科学研究者のための論文書き方ガイド

### **The Scientist's Guide to Writing: How to Write More Easily and Effectively Throughout Your Scientific Career**

Heard, Stephen B.

(Princeton U.P.)

2016:04 320 p. Hardback 9780691170213 ¥7,670 Paperback 9780691170220 ¥2,810

Drawing on his own experience as a scientist, graduate adviser, and editor, Stephen Heard emphasizes that the goal of all scientific writing should be absolute clarity; that good writing takes deliberate practice; and that what many scientists need are not long lists of prescriptive rules but rather direct engagement with their behaviors and attitudes when they write. He combines advice on such topics as how to generate and maintain writing momentum with practical tips on structuring a scientific paper, revising a first draft, handling citations, responding to peer reviews, managing coauthorships, and more.