NEW & NOTEWORTHY from Birkhäuser

Sampling, Wavelets, and Tomography

J.J. BENEDETTO, *University of Maryland, College MD;* and **A.I ZAYED,** *DePaul University, Chicago, IL (Eds.)*

"The book places emphasis on all three themes it considers. It presents applications with a broad perspective... The book, containing contributions of some of the renowned scientists in the field, is interesting and informative, and presents an insightful approach towards wavelets, sampling theory, and tomography. To conclude, the book is of immense value to the mathematically inclined researcher whose work centers around the application of sampling theory."

-JOURNAL OF THE INDIAN INSTITUTE OF SCIENCE

2003/344 PP., 50 ILLUS./HARDCOVER ISBN 0-8176-4304-4/\$74.95 APPLIED AND NUMERICAL HARMONIC ANALYSIS

Modern Sampling Theory

Mathematics and Applications

J.J. BENEDETTO, University of Maryland, College MD; and P.J.S.G. FERREIRA, University of Aveiro, Portugal (Eds.)

"The introduction gives an excellent overview of the history and development of sampling theory. It shows that the WSK sampling theory has roots in many classical areas of mathematics, such as harmonic analysis, number theory, and interpolation theory...The introduction then proceeds to show how sampling theory is connected to more recent topics in mathematical analysis, such as wavelets, Gabor systems, density theorems, frames, and sampling in locally compact abelian groups." —MATHEMATICAL REVIEWS

2001/440 PP., 30 ILLUS./HARDCOVER ISBN 0-8176-4023-1/\$89.95 APPLIED AND NUMERICAL HARMONIC ANALYSIS

An Introduction to Frames and Riesz Bases

O. CHRISTENSEN, Technical University of Denmark, Lyngby, Denmark

"This book is well written, the proofs are clear and not too terse, and the work is well suited for use as a textbook. The author has made many contributions to the theory of frames and Riesz bases, and the book benefits from his scope and perspective."

—ZENTRALBLATT MATH

2003/464 PP., 16 ILLUS./HARDCOVER ISBN 0-8176-4295-1/\$69.95 APPLIED AND NUMERICAL HARMONIC ANALYSIS

A Software-Defined GPS and Galileo Receiver

A Single-Frequency Approach

DENNIS M. AKOS, University of Colorado, Boulder, KAI BORRE; NICOLAJ BERTELSEN; PETER RINDER; SØREN H. JENSEN, all, Aalborg University, Denmark

This book and accompanying DVD explore the use of new technologies in the area of satellite navigation receivers.

Key features and topics include: presentation of basic signal structures used in GPS and Galileo (the European satellite navigation system) · design and implementation of a GPS signal generator using simulated signals · implementation of analyzed methods in MATLAB, and a discussion of the choice of algorithms involved · a hands-on method of testing the material covered in the book: hardware equipment—which may be purchased online—enables readers to generate real-world data, and downloadable MATLAB software allows readers to change various parameters and immediately see their effect.

2006/APPROX. 192 PP., 80 ILLUS./SOFTCOVER WITH DVD ISBN 0-8176-4390-7/\$79.95 (TENT.)
APPLIED AND NUMERICAL HARMONIC ANALYSIS

CALL: 1-800-777-4643 • FAX: (201) 348-4505 E-MAIL: orders@birkhauser.com

Prices are valid in the Americas onlyand are subject to change without notice. For price and ordering information outside the Americas, please contact Birkhäuser Verlag AG by E-mail: birkhauser@springer.de

