

CAMBRIDGE SCIENTIFIC PUBLISHERS

AN INTERNATIONAL BOOK SERIES
STABILITY OSCILLATIONS AND OPTIMIZATION OF SYSTEMS

Stabilization of Linear Systems

Stability, Oscillations and Optimization of Systems: Volume 5

430 pp, 2011 ISBN 978-1-904868-89-7 £55/\$100/€80

G.A. Leonov

St. Petersburg State University, St. Petersburg, Russia

M.M. Shumafov

Adyghe State University, Maykop, Russia

This volume presents full survey of stabilization theory for linear control systems. The flow of publications concerned with the methods of stabilization for linear control systems increases in the last 30 years. The book sets out these new methods for solution of the problem of stabilization and pole assigned. The methods of low-frequency stabilization and high-frequency stabilization for solution of the Brockett problem are presented.

Written by a leading experts in stabilization theory, the book

- explains the methods of stabilization for linear control systems
- introduces new methods of low-frequency and high-frequency stabilization
- includes many important results, some of which is previously unpublished
- Poincare mapping, realizing the embedding of unstable manifolds, are constructed.

The **Stabilization of Linear Systems** addressed to specialists in dynamical systems, applied differential equations, and the control theory. It may be useful for graduated students in mathematics, control theory, and mechanical engineering.

CONTENTS

Introduction • Transfer function and frequency response • Controllability and observability • Stationary stabilization of linear systems • Non-stationary low-frequency stabilization • Non-stationary high-frequency stabilization • Stabilization of discrete systems • References

Please send order form to:

Cambridge Scientific Publishers

PO Box 806, Cottenham, Cambridge CB4 8RT Telephone: +44 (0) 1954
251283

Fax: +44 (0) 1954 252517 Email:

janie.wardle@cambridgescientificpublishers.com

Or buy direct from our secure website:

www.cambridgescientificpublishers.com
