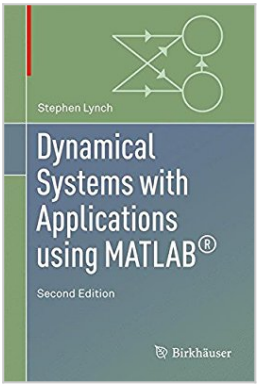

Dynamical Systems with Applications using MATLAB®

By Stephen Lynch

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· sections on series solutions of ordinary differential equations, perturbation methods, normal forms, Gröbner bases, and chaos synchronization;

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Praise for the first edition

Summing up, it can be said that this text allows the reader to have an easy and

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The MATLAB programs are kept as simple as possible and the author's experience has shown that this method of teaching using MATLAB works well with computer laboratory classes of small sizes…. I recommend 'Dynamical Systems with Applications using MATLAB' as a good handbook for a diverse readership: graduates and professionals in mathematics, physics, science and engineering.

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Editorial Review

Review

“The present book constitutes an introduction to the main concepts and techniques of dynamical systems … . this book constitutes a valuable reference to the existing literature on dynamical systems, specially for the remarkable collection of examples and applications selected from very different areas as well as for its treatment with MATLAB of these problems.” (Fernando Casas, zbMATH 1319.37002, 2015)

“Dynamical Systems with Applications using MATLAB provides a comprehensive introduction to the theory of dynamical systems and is designed for use by both advanced undergraduate and beginning graduate students. Its vast compilation of applications also makes this text a great resource for applied mathematicians, engineers, physicists, and researchers … . Instructors will be pleased to find an aims and objectives section at the beginning of each chapter where the author outlines its content and provides student learning objectives.” (Stanley R. Huddy, MAA Reviews, November, 2014)

From the Back Cover

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About the Author
Stephen Lynch is Senior Lecturer in the Department of Computing and Mathematics at Manchester Metropolitan University.

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