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内容概要

At a time when mathematical modeling is pervading many areas of science and master's degree programs in industrial mathematics are being initiated in many universities, this book is intended as an introduction to continuum mechanics and mathematical modeling. One of the aims of the book is to reduce the gap slightly between mathematics and this area of natural science - a gap that is usually due to the language barrier and to the differences in thinking and reasoning. This book is written in a style suitable for mathematicians and adapted to their training. We have tried to remain very close to physics and to mathematics at the same time by making, in particular, a clear separation between what is assumed and what is proved. As it is, the book may appeal as well to a broader audience, such as engineers who would like to have a different perspective on the field, relying less on physical intuition, and advanced researchers who would like an introduction to a field new to them.

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