

**Master solid programming skills
in the context of learning and applying physics**

In the third edition of this acclaimed and highly regarded undergraduate textbook, authors Harvey Gould and Jan Tobochnik are joined by Wolfgang Christian for a thorough and progressive update using Java—currently the most popular programming language. The text retains its renowned focus on teaching and learning physics concepts and their applications through computer simulations. This new edition uses object-oriented programming to encourage the development of good programming habits in the context of doing physics. Appropriate for introductory courses, the text allows individuals with a wide variety of backgrounds and abilities to work together.

updated throughout with new material on Java, complex systems, and rigid body dynamics, and relativity.

learning physics through example using computer simulations used at a variety of levels within the physics curriculum.

written in Java using the Open Source Physics library (See *Open Source Physics: A User's Guide*, by Wolfgang Christian) to make input/output, plots, and routine numerical tasks easy to implement.

standard textbook in computational physics. It is exciting to see a new edition appearing, especially the work of Wolfgang Christian, and a conversion to Java. This new edition provides just the right mix of computation with interesting problems." — *Alejandro L. Garcia, San Jose State University*

ity nature of the problems strongly encourages the student to experiment with the concepts, and to see physics as an exploratory and experimental discipline. I consider this a particularly valuable strength of this book." — *Lowell M. Boone, The College of Wooster*

expressed with the wonderful collection of problems and questions in this text." — *David Godunov, Old Dominion University*

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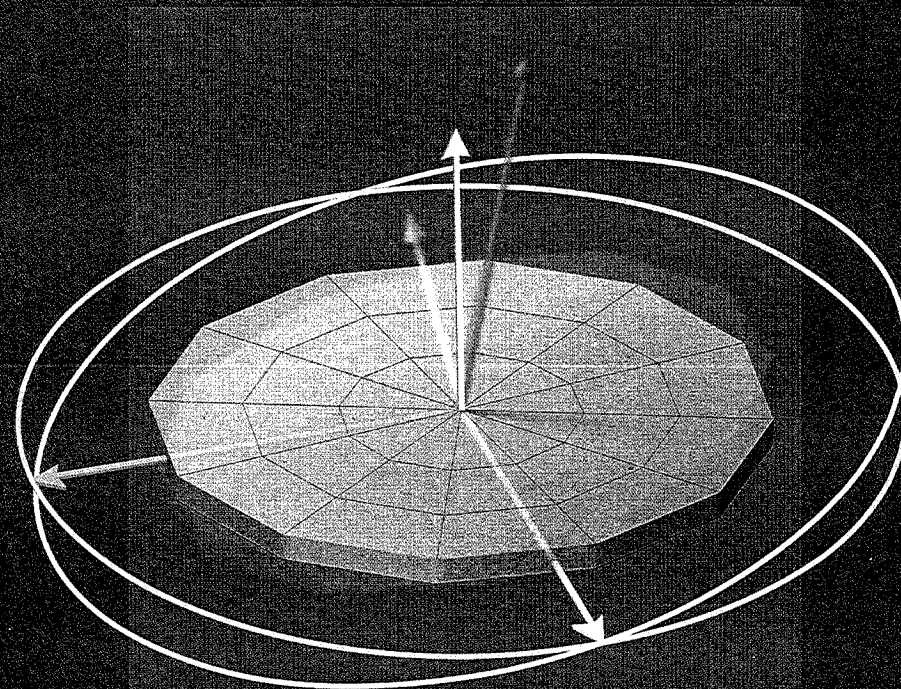


Gould
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An Introduction to
COMPUTER SIMULATION METHODS
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An Introduction to
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THIRD EDITION
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