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Nota di contenuto	Refinement: An overview -- Transformation Laws for Sequential Object-Oriented Programming -- Using CSP -- Developing and Reasoning About Probabilistic Programs in pGCL -- Real-Time and Fault-Tolerant Systems -- A Tutorial Introduction to CSP in Unifying Theories of Programming -- Using the Compliance Notation in Industry -- Techniques for Temporal Logic Model Checking.
Sommario/riassunto	The Pernambuco School on Software Engineering (PSSE) 2004 was the first in a series of events devoted to the study of advanced computer science and to the promotion of international scientific collaboration. The main theme in 2004 was refinement (or reification). Refinement describes the verifiable relationship between a specification and its

implementation; it also describes the process of discovering appropriate implementations, given a specification. Thus, in one way or another, refinement is at the heart of the programming process, and so is the major daily activity of every professional software engineer. The Summer School and its proceedings were intended to give a detailed tutorial introduction to the scientific basis of this activity. These proceedings record the contributions from the invited lecturers. Each chapter is the result of a thorough revision of the initial notes provided to the participants of the school. The revision was inspired by the synergy generated by the opportunity for the lecturers to present and discuss their work among themselves, and with the school's attendees. The editors have tried to produce a coherent view of the topic by harmonizing these contributions, smoothing out differences in notation and approach, and providing links between the lectures. We apologize to the authors for any errors introduced by our extensive editing. Although the chapters are linked in several ways, each one is sufficiently self-contained to be read in isolation. Nevertheless, Chap. 1 should be read first by those interested in an introduction to refinement.

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