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Titolo	Guide to Fortran 2008 Programming // by Walter S. Brainerd
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Soggetti	Programming languages (Electronic computers) Numerical analysis Programming Languages, Compilers, Interpreters Numeric Computing
Lingua di pubblicazione	Inglese
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Nota di contenuto	Introduction to Programming in Fortran -- Control Constructs -- Modules and Procedures -- Arrays -- Character Data -- Structures and Derived Types -- IEEE Arithmetic and Exceptions -- More about Modules and Procedures -- Extending Fortran -- Pointer and Allocatable Variables -- Input and Output -- Object-Oriented Programming -- Coarrays -- Appendix A: Intrinsic Procedures -- Appendix B: Fortran Language Forms.
Sommario/riassunto	This concise and easy-to read textbook provides an accessible introduction to the most important features of Fortran 2008 (also known as Fortran 08), the latest standard version of Fortran. Both the style of the many example programs and the selection of topics discussed in detail guide the reader toward acquiring programming skills to produce Fortran programs that are readable, maintainable, and efficient. The text is organized for instruction from beginning to end, but also so that particular topics may be studied and read independently—making the work eminently suitable as a reference for professionals. Topics and features: Presents a complete discussion of all the basic features needed to write complete Fortran programs Makes extensive use of examples and case studies to illustrate the practical use of features of Fortran 08, and supplies simple problems for the reader to test their knowledge Provides a detailed exploration of

control constructs, modules, procedures, arrays, character strings, data structures and derived types, pointer variables, and object-oriented programming Includes coverage of such major new features in Fortran 08 as coarrays, submodules, parameterized derived types, and derived-type input and output Highlights the topic of modules as the framework for organizing data and procedures for a Fortran program Investigates the excellent input/output facilities available in Fortran Contains appendices listing the many intrinsic procedures and providing a brief informal syntax specification for the language This indispensable guide provides a tutorial for anyone who wants to learn Fortran 08, including those familiar with programming language concepts but unfamiliar with Fortran. Experienced Fortran 90/95 programmers will be able to use this volume to assimilate quickly those features in Fortran 03 and 08 that are not in Fortran 90 or 95.
