1. Record Nr. UNINA990004469290403321

Autore	Perez, Bernard <1836-1903>
Titolo	Les trois premieres annees : De l'enfant / Bernard Perez ; precedee d'une introduction de James Sully
Pubbl/distr/stampa	Paris : Ancienne Librairie Germer- Baillier et C.ie, 1886
Edizione	[3e ed.]
Descrizione fisica	XX, 347 p. ; 19 cm
Locazione	FLFBC
Collocazione	5/ V B 27
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910465743103321

Autore	Davies Alan J
Titolo	The finite element method [[electronic resource]] : an introduction with partial differential equations / / A.J. Davies
Pubbl/distr/stampa	Oxford ; ; New York, : Oxford University Press, 2011
ISBN	1-283-42690-0 9786613426901 0-19-163033-0
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (308 p.)
Disciplina	518/.25
Soggetti	Finite element method Numerical analysis Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.

Nota di contenuto

Cover; Contents; 1 Historical introduction; 2 Weighted residual and variational methods; 2.1 Classification of differential operators; 2.2 Self-adjoint positive definite operators; 2.3 Weighted residual methods; 2.4 Extremum formulation: homogeneous boundary conditions; 2.5 Non-homogeneous boundary conditions; 2.6 Partial differential equations: natural boundary conditions; 2.7 The Rayleigh-Ritz method; 2.8 The 'elastic analogy' for Poisson's equation; 2.9 Variational methods for time-dependent problems; 2.10 Exercises and solutions; 3 The finite element method for elliptic problems
3.1 Difficulties associated with the application of weighted residual methods3.2 Piecewise application of the Galerkin method; 3.3 Terminology; 3.4 Finite element idealization; 3.5 Illustrative problem involving one independent variable; 3.6 Finite element equations for Poisson's equation; 3.7 A rectangular element for Poisson's equation; 3.8 A triangular element for Poisson's equation; 3.9 Exercises and solutions; 4 Higher-order elements: the isoparametric concept; 4.1 A two-point boundary-value problem; 4.2 Higher-order rectangular elements; 4.3 Higher-order triangular elements
4.4 Two degrees of freedom at each node4.5 Condensation of internal nodal freedoms; 4.6 Curved boundaries and higher-order elements: isoparametric elements; 4.7 Exercises and solutions; 5 Further topics in the finite element method; 5.1 The variational approach; 5.2 Collocation and least squares methods; 5.3 Use of Galerkin's method for time-dependent and non-linear problems; 5.4 Time-dependent problems using variational principles which are not extremal; 5.5 The Laplace transform; 5.6 Exercises and solutions; 6 Convergence of the finite element method; 6.1 A one-dimensional example
6.2 Two-dimensional problems involving Poisson's equation6.3 Isoparametric elements: numerical integration; 6.4 Non-conforming elements: the patch test; 6.5 Comparison with the finite difference method: stability; 6.6 Exercises and solutions; 7 The boundary element method; 7.1 Integral formulation of boundary-value problems; 7.2 Boundary element idealization for Laplace's equation; 7.3 A constant boundary element for Laplace's equation; 7.4 A linear element for Laplace's equation; 7.5 Time-dependent problems; 7.6 Exercises and solutions; 8 Computational aspects; 8.1 Pre-processor
8.2 Solution phase8.3 Post-processor; 8.4 Finite element method (FEM) or boundary element method (BEM)?; Appendix A: Partial differential equation models in the physical sciences; A.1 Parabolic problems; A.2 Elliptic problems; A.3 Hyperbolic problems; A.4 Initial and boundary conditions; Appendix B: Some integral theorems of the vector calculus; Appendix C: A formula for integrating products of area coordinates over a triangle; Appendix D: Numerical integration formulae; D.1 One-dimensional Gauss quadrature; D.2 Two-dimensional Gauss quadrature; D.3 Logarithmic Gauss quadrature
Appendix E: Stehfest's formula and weights for numerical Laplace transform inversion

Sommario/riassunto

The finite element method is a technique for solving problems in applied science and engineering. The essence of this book is the application of the finite element method to the solution of boundary and initial-value problems posed in terms of partial differential equations. The method is developed for the solution of Poisson's equation, in a weighted-residual context, and then proceeds to time-dependent and nonlinear problems. The relationship with the variational approach is alsoexplained. This book is written at an introductory level, developing all the necessary concepts where required. Co

3. Record Nr. UNINA9910459795903321

Autore	Brubaker Ben <1976->
Titolo	Weyl group multiple Dirichlet [[electronic resource] /] / Ben Brubaker, Daniel Bump, and Solomon Friedberg
Pubbl/distr/stampa	Princeton, N.J., : Princeton University Press, c2011
ISBN	1-283-01338-X 9786613013385 1-4008-3899-1
Edizione	[Course Book]
Descrizione fisica	1 online resource (173 p.)
Collana	Annals of mathematics studies ; ; no. 175
Altri autori (Persone)	BumpDaniel <1952-> FriedbergSolomon <1958->
Disciplina	515/.243
Soggetti	Dirichlet series Weyl groups Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front matter -- Contents -- Preface -- Chapter One. Type A Weyl Group Multiple Dirichlet Series -- Chapter Two. Crystals and Gelfand-Tsetlin Patterns -- Chapter Three. Duality -- Chapter Four. Whittaker Functions -- Chapter Five. Tokuyama's Theorem -- Chapter Six. Outline of the Proof -- Chapter Seven. Statement B Implies Statement A -- Chapter Eight. Cartoons -- Chapter Nine. Snakes -- Chapter Ten. Noncritical Resonances -- Chapter Eleven. Types -- Chapter Twelve. Knowability -- Chapter Thirteen. The Reduction to Statement D -- Chapter Fourteen. Statement E Implies Statement D -- Chapter Fifteen. Evaluation of and , and Statement G -- Chapter Sixteen. Concurrence -- Chapter Seventeen. Conclusion of the Proof -- Chapter Eighteen. Statement B and Crystal Graphs -- Chapter Nineteen. Statement B and the Yang-Baxter Equation -- Chapter Twenty. Crystals and p-adic Integration -- Bibliography -- Notation -- Index
Sommario/riassunto	Weyl group multiple Dirichlet series are generalizations of the Riemann zeta function. Like the Riemann zeta function, they are Dirichlet series with analytic continuation and functional equations, having applications to analytic number theory. By contrast, these Weyl group multiple

Dirichlet series may be functions of several complex variables and their groups of functional equations may be arbitrary finite Weyl groups. Furthermore, their coefficients are multiplicative up to roots of unity, generalizing the notion of Euler products. This book proves foundational results about these series and develops their combinatorics. These interesting functions may be described as Whittaker coefficients of Eisenstein series on metaplectic groups, but this characterization doesn't readily lead to an explicit description of the coefficients. The coefficients may be expressed as sums over Kashiwara crystals, which are combinatorial analogs of characters of irreducible representations of Lie groups. For Cartan Type A, there are two distinguished descriptions, and if these are known to be equal, the analytic properties of the Dirichlet series follow. Proving the equality of the two combinatorial definitions of the Weyl group multiple Dirichlet series requires the comparison of two sums of products of Gauss sums over lattice points in polytopes. Through a series of surprising combinatorial reductions, this is accomplished. The book includes expository material about crystals, deformations of the Weyl character formula, and the Yang-Baxter equation.