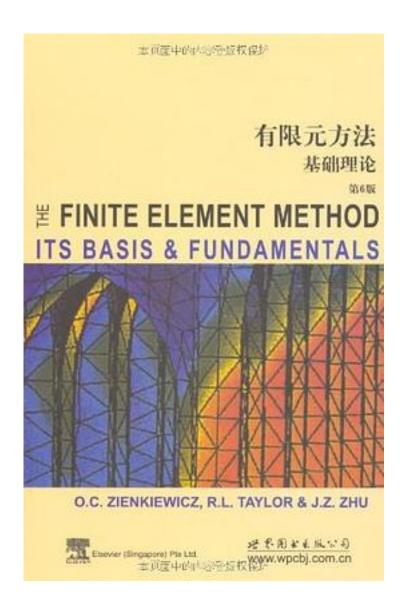
## 有限元方法基础理论



### 有限元方法基础理论\_下载链接1\_

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《有限元方法基础论第6版》的特点是理论可靠,内容全面,既有基础理论,又有其具体应用。第1卷目次:标准的离散系统和有限元方法的起源;弹性力学问题的直接方法;有限元概念的推广,Galerkin加权残数和变分法;'标准的'和'晋级的'单元形函数:Co连续性单元族;映射单元和数值积分—无限元和奇异元;线性弹性问题;场问题—热传导、电磁势、流体流动;自动网格生成;拼法试验,简缩积分和非协调元;混合公式和约束—完全场方法;不可压缩材料,混合方法和其它解法;多区域混合逼近一区域分解和"框架"方法;误差、恢复过程和误差估计;自适应有限元细分;以点为基础和单元分割的近似,扩展的有限元方法;时间维-场的半离散化、动力学问题以及分析解方法;时间维—时间的离散化近似;耦合系统;有限元分析和计算机处理。

#### 作者介绍:

O.C.Zienkiewicz教授,英国Swansea大学的荣誉退休教授,是该校工程数值方法研究所的原主任,现在仍然是西班牙巴塞罗那Calalunya技术大学工程数值方法的UNESCO主席。从1961至1989年,担任Swansea大学土木工程系的主任,使该系成为有限元研究的重要中心之一。在1968年,创办了International Journal for NumericalMethods in Engineering杂志并任主编,该杂志至今仍然是该领域的主要刊物。他被授予24个荣誉学位和多种奖励。Zienkiewicz教授还是5所科学院的院士,这是对他在有限元方法领域的奠基性发展和贡献的赞誉。1978年,成为皇家科学院和皇家工程院的院士;并先后被选为美国工程院的外籍院士(1981),波兰科学院院士(1985),中国科学院院士(1998)和意大利国家科学院院士(1999)。1967年,他出版了本书的第1版,直到1971年,本书的第1版仍然是该领域的惟一书籍。

R.L.Taylor教授在结构和固体力学建模和仿真方面,具有35年的经历,其中在工业界工作2年。1991年,被选为美国国家工程院的院士,以表彰他对计算力学领域的教育和研究的贡献。1992年,被任命为T.Y.和Margaret Lin工程教授;1994年,获得Berkeley Citation奖,这是加利福尼亚大学伯克利分校的最高荣誉奖。1997年,Taylor教授成为美国计算力学学会的资深会员,并在最近被选为国际计算力学学会的资深会员,并获得了USACM John von

Neumann奖章。Taylor教授编写了几套应用于结构和非结构系统的有限元分析的计算机程序,FEAP是其中之一,在世界各国的教学和研究领域得到了广泛的应用。现在FEAP更全面地结合于本书中以展示非线性和有限变形的问题。

#### 目录: Preface

- 1 The standard discrete system and origins of the finite element method
- 1.1 Introduction
- 1.2 The structural element and the structural system
- 1.3 Assembly and analysis of a structure
- 1.4 The boundary conditions
- 1.5 Electrical and fluid networks
- 1.6 The general pattern
- 1.7 The standard discrete system
- 1.8 Transformation of coordinates
- 1.9 Problems
- 2 A direct physical approach to problems in elasticity: plane stress
- 2.1 Introduction
- 2.2 Direct formulation of finite element characteristics
- 2.3 Generalization to the whole region internal nodal force concept abandoned
- 2.4 Displacement approach as a minimization of total potential energy
- 2.5 Convergence criteria
- 2.6 Discretization error and convergence rate
- 2.7 Displacement functions with discontinuity between elements -non-conforming

elements and the patch test

- 2.8 Finite element solution process
- 2.9 Numerical examples 2.10 Concluding remarks
- 2.11 Problems
- 3 Generalization of the finite element concepts. Galerkin-weighted residual and variational approaches

3.1 Introduction

- 3.2 Integral or 'weak' statements equivalent to the differential equations
- 3.3 Approximation to integral formulations: the weighted residual-Galerkin method 3.4 Vitual work as the 'weak form' of equilibrium equations for analysis of solids or
- fluids
- 3.5 Partial discretization

3.6 Convergence

3.7 What are 'variational principles' ?

- 3.8 'Natural' variational principles and their relation to governing differential equations
- 3.9 Establishment of natural variational principles for linear, self-adjoint, differentaal equations

3.10 Maximum, minimum, or a saddle point?

3.11 Constrained variational principles. Lagrange multipliers

3.12 Constrained variational principles. Penalty function and perturbed lagrangian methods

3.13 Least squares approximations

3.14 Concluding remarks - finite difference and boundary methods

3.15 Problems

4 Standard' and 'hierarchical' element shape functions: some general families of Co continuity

4.1 Introduction

4.2 Standard and hierarchical concepts

4.3 Rectangular elements - some preliminary considerations

4.4 Completeness of polynomials

- 4.5 Rectangular elements Lagrange family
- 4.6 Rectangular dements 'serendipity' family 4.7 Triangular element family

4.8 Line elements

4.9 Rectangular prisms - Lagrange family

4.10 Rectangular prisms - 'serendipity' family

4.11 Tetrahedral dements

4.12 Other simple three-dimensional elements

4.13 Hierarchic polynomials in one dimension

4.14 Two- and three-dimensional, hierarchical elements of the 'rectangle' or 'brick' type

4.15 Triangle and tetrahedron family

4.16 Improvement of conditioning with hierarchical forms

4.17 Global and local finite element approximation

4.18 Elimination of internal parameters before assembly - substructures

4.19 Concluding remarks

- 4.20 Problems
- 5 Mapped elements and numerical integration 'infinite' and 'singularity elements'

5.1 Introduction

5.2 Use of 'shape functions' in the establishment of coordinate transformations

5.3 Geometrical conformity of elements

5.4 Variation of the unknown function within distorted, curvilinear elements. Continuity requirements

- 5.5 Evaluation of element matrices. Transformation in  $\varepsilon$ ,  $\eta$ ,  $\zeta$  coordinates
- 5.6 Evaluation of element matrices. Transformation in area and volumecoordinates

5.7 Order of convergence for mapped elements

5.8 Shape functions by degeneration

5.9 Numerical integration - one dimensional

- 5.10 Numerical integration rectangular (2D) or brick regions (3D)
- 5.11 Numerical integration triangular or tetrahedral regions

5.12 Required order of numerical integration 5.13 Generation of finite element meshes by mapping. Blending functions

5.14 Infinite domains and infinite elements

- 5.15 Singular elements by mapping use in fracture mechanics, etc.
- 5.16 Computational advantage of numerically integrated finite elements

5.17 Problems

6 Problems in linear elasticity

6.1 Introduction

6.2 Governing equations

6.3 Finite element approximation

6.4 Reporting of results: displacements, strains and stresses

6.5 Numerical examples

6.6 Problems

7 Field problems - heat conduction, electric and magnetic potential and fluid flow

7.1 Introduction

7.2 General quasi-harmonic equation

7.3 Finite element solution process

- 7.4 Partial discretization transient problems
- 7.5 Numerical examples an assessment of accuracy

7.6 Concluding remarks

7.7 Problems

8 Automatic mesh generation

8.1 Introduction

8.2 Two-dimensional mesh generation - advancing front method

8.3 Surface mesh generation

8.4 Three-dimensional mesh generation - Delaunay triangulation

8.5 Concluding remarks

8.6 Problems

9 The patch test, reduced integration, and non-conforming elements

9.1 Introduction

9.2 Convergence requirements

9.3 The simple patch test (tests A and B) - a necessary condition for convergence

9.4 Generalized patch test (test C) and the single-element test

9.5 The generality of a numerical patch test

9.6 Higher order patch tests

9.7 Application of the patch test to plane elasticity dements with 'standard' and 'reduced' quadrature

9.8 Application of the patch test to an incompatible element

9.9 Higher order patch test - assessment of robustness

9.10 Concluding remarks

9.11 Problems

10 Mixed formulation and constraints - complete field methods

10.1 Introduction

10.2 Discretization of mixed forms - some general remarks

10.3 Stability of mixed approximation. The patch test

10.4 Two-fidd mixed formulation in elasticity

10.5 Three-field mixed formulations in elasticity

10.6 Complementary forms with direct constraint

10.7 Concluding remarks - mixed formulation or a test of element 'robustness'

10.8 Problems

11 Incompressible problems, mixed methods and other procedures of solution

11.1 Introduction

11.2 Deviatoric stress and strain, pressure and volume change

11.3 Two-field incompressible elasticity (up form)

11.4 Three-field nearly incompressible elasticity (u-p-~o form)

11.5 Reduced and selective integration and its equivalence to penalized mixed problems

11.6 A simple iterative solution process for mixed problems: Uzawa method

11.7 Stabilized methods for some mixed elements failing the incompressibility patch test

11.8 Concluding remarks

11.9 Problems

12 Multidomain mixed approximations - domain decomposition and 'frame' methods

12.1 Introduction

12.2 Linking of two or more subdomains by Lagrange multipliers

12.3 Linking of two or more subdomains by perturbed lagrangian and penalty methods

12.4 Interface displacement 'frame'

- 12.5 Linking of boundary (or Trefftz)-type solution by the 'frame' of specified displacements
- 12.6 Subdomains with 'standard' elements and global functions

12.7 Concluding remarks

12.8 Problems

13 Errors, recovery processes and error estimates

13.1 Definition of errors

13.2 Superconvergence and optimal sampling points

13.3 Recovery of gradients and stresses

- 13.4 Superconvergent patch recovery -, SPR
- 13.5 Recovery by equilibration of patches REP

13.6 Error estimates by recovery 13.7 Residual-based methods

13.8 Asymptotic behaviour and robustness of error estimators - the Babuska patch test

13.9 Bounds on quantities of interest

13.10 Which errors should concern us?

13.11 Problems

14 Adaptive finite element refinement

14.1 Introduction

14.2 Adaptive h-refinement

14.3 p-refinement and hp-refinement

14.4 Concluding remarks

14.5 Problems

15 Point-based and partition of unity approximations. Extended finite element methods

15.1 Introduction

15.2 Function approximation

15.3 Moving least squares approximations - restoration of continuity of approximation

15.4 Hierarchical enhancement of moving least squares expansions

15.5 Point collocation - finite point methods

15.6 Galerkin weighting and finite volume methods

15.7 Use of hierarchic and special functions based on standard finite elements satisfying the partition of unity requirement

15.8 Concluding remarks

15.9 Problems

16 The time dimension - semi-discretization of field and dynamic problems and analytical solution procedures

16.1 Introduction

16.2 Direct formulation of time-dependent problems with spatial finite element subdivision

16.3 General classification

16.4 Free response - eigenvalues for second-order problems and dynamic vibration 16.5 Free response - eigenvalues for first-order problems and heat conduction, etc.

16.6 Free response - damped dynamic eigenvalues

16.7 Forced periodic response

16.8 Transient response by analytical procedures

16.9 Symmetry and repeatability

16.10 Problems

17 The time dimension - discrete approximation in time

17.1 Introduction

17.2 Simple time-step algorithms for the first-order equation

17.3 General single-step algorithms for first- and second-order equations

17.4 Stability of general algorithms 17.5 Multistep recurrence algorithms

17.6 Some remarks on general performance of numerical algorithms

17.7 Time discontinuous Galerkin approximation

17.8 Concluding remarks

17.9 Problems

18 Coupled systems

18.1 Coupled problems - definition and classification

18.2 Fluid-structure interaction (Class I problems) 18.3 Soil-pore fluid interaction (Class II problems)

18.4 Partitioned single-phase systems - implicit--explicit partitions(Class I problems)

18.5 Staggered solution processes

18.6 Concluding remarks

19 Computer procedures for finite dement analysis

19.1 Introduction

19.2 Pre-processing module: mesh creation

19.3 Solution module

19.4 Post-processor module

19.5 User modules

Appendix A: Matrix algebra

Appendix B: Tensor-indicial notation in the approximation of elasticity problems

Appendix C: Solution of simultaneous linear algebraic equations

Appendix D: Some integration formulae for a triangle Appendix E: Some integration formulae for a tetrahedron

Appendix F: Some vector algebra

Appendix G: Integration by parts in two or three dimensions (Green's theorem)

Appendix H: Solutions exact at nodes

Appendix I: Matrix diagonalization or lumping

Author index Subject index

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# 标签 有限元 数学 数值计算 计算数学 计算力学7 计算力学 评论 有限元方法基础理论\_下载链接1\_ 书评 今天查书的第一作者时,发现作者已经去世了,在2009年的时候。http://www.swan.ac.uk/engineering/computational/zienkiewicz/http://blog.sina.com.cn/s/blog\_48c735630100oyam.html查了他老人家的背景,原来是帝国理工毕业的,拿了2个博士学位。很厉害的人物。现在还剩下… 有限元方法基础理论 下载链接1