

1.3 Difficulties associated with application of “classical” weak form

A

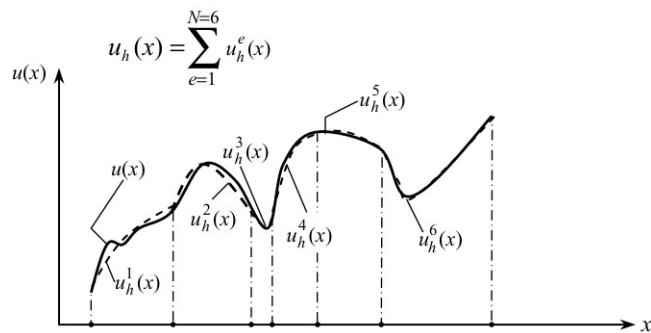
O

$$(1.10) \quad u(x) = \sum_{i=0}^n a_i \phi_i(x)$$

F

approximation functions

() O () G () T
 seeking approximate solution on a collection of subdomains ()



T

u essential I

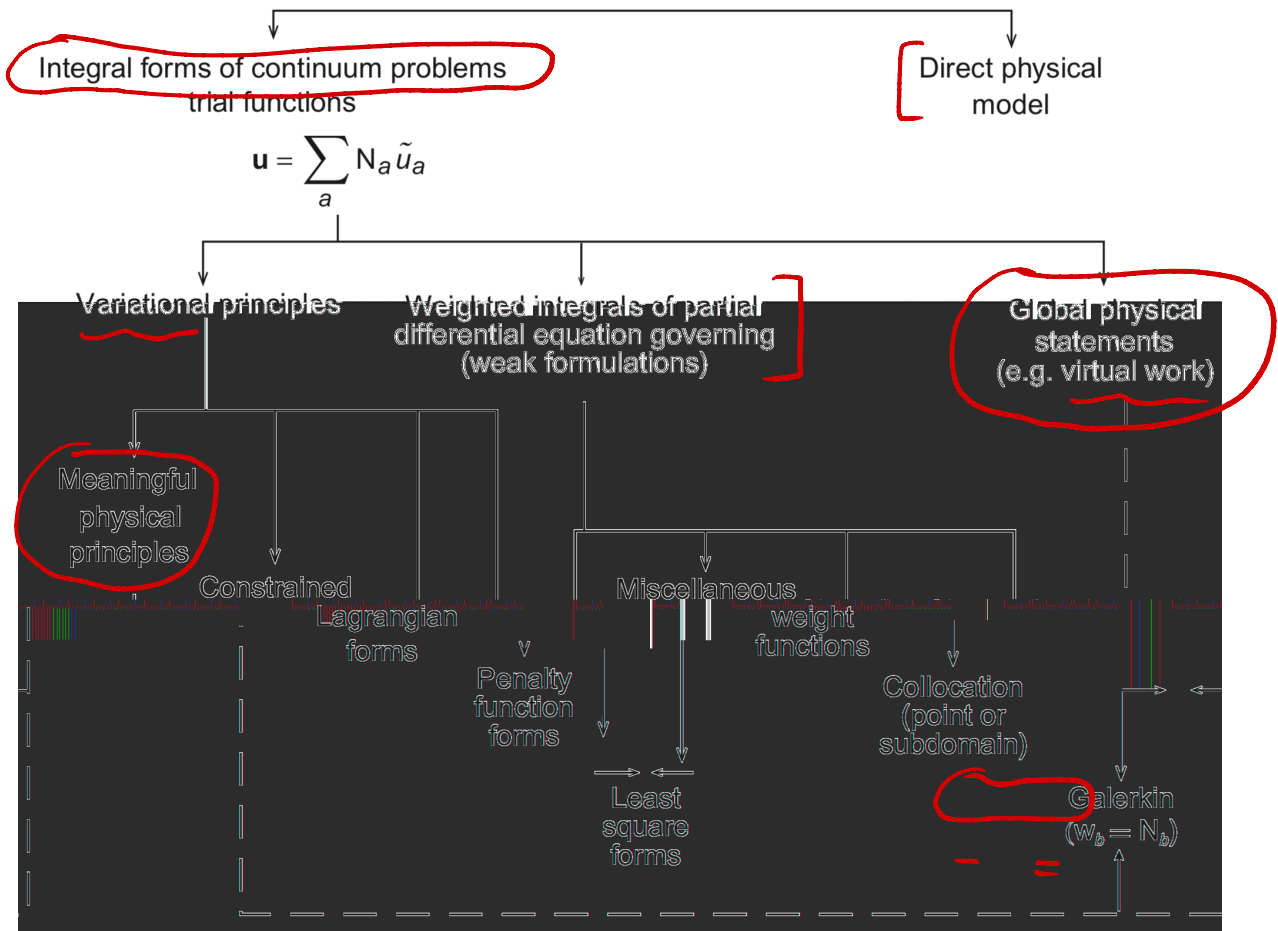
$$a_i \quad u = \sum_{i=0}^n a_i \phi_i$$

T ,

H _____ ?
 A C 2, the finite element method
 nodal unknowns.

1.4 Chapter Summary

1. T (M R) G : -
 in terms of unknown parameters



any elastic system (linear and nonlinear elastic systems). T

V

F

G

R

5. T : (1)
- (2) **admissible** 2D 3D
- (, , G , R R).

6. The finite element method

nodal unknowns. T