Status: 2010-07-31

Revisions on

Development and Application of the Finite Element Method based on MATLAB.

The following corrections must be considered:

• Page 12 - Eqn. (2.5): transposition of matrix With respect to a general representation, it might be better to formulate

$$\mathbf{T}^* = \mathbf{Q}^{ ext{T}} \cdot \mathbf{T} \cdot \mathbf{Q}$$
 .

But be careful with same implementations, e.g. the ABAQUS internal *eigenvalue solver* SPRIND, which results in the transposed matrix structures as given before.

• Page 16 - Eqn. (2.20) and (2.21): '-'-sign and indices

$$I_2(\mathbf{C}) = I_2(\mathbf{b}) = \frac{1}{2} \left[ (\operatorname{trace} \mathbf{C})^2 - \operatorname{trace} \mathbf{C}^2 \right]$$
  
=  $\operatorname{trace} \mathbf{C}^{-1} \det \mathbf{C} = \lambda_1^2 \lambda_2^2 + \lambda_1^2 \lambda_3^2 + \lambda_2^2 \lambda_3^2$ 

Please excuse all associated inadequacies. For further notes I am very grateful ! H. Baaser