Code_Aster

Version default

Titre : Opérateur DYNA_SPEC_MODAL
Responsable : BERRO Hassan

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Clé : U4.53.23 *Révision* :
7556db1dce5f

Operator `DYNA_SPEC_MODAL`

1 Goal

To calculate the response by modal recombination of a linear structure to a random excitation. This excitation is defined in the form of interspectres of power of modal efforts. The answer is established in the form of interspectres power of generalized displacements.

Each matrix interspectrale is associated with a modal base for which the answer is calculated. The produced result is a concept of the type `interspectre`.

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2   Syntax

```
tinsp [interspectre] = DYNA_SPEC_MODAL (
```

♦   BASE_ELAS_FLUI   =   bef,   [melasflu]

♦   VITE_FLUI   =   vitefl   [R]

◊   PRECISION   = / 1.E-3   [DEFECT]
                    / prec   [R]

♦   EXCIT = _F (

    ♦   INTE_SPEC_GENE = exc ,   [interspectre]

)

◊   OPTION   = / 'ALL'   [DEFECT]
                           / 'DIAG',

◊   TITLE   =   title,   [TXM]

            );

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3   Operands

3.1   Operand BASE_ELAS_FLUI

♦   BASE_ELAS_FLUI = bef

Concept of the type melasflu, defines a set of modal bases associated with the various rates of flow with the fluid.

3.2   Keyword VITE_FLUI

♦   VITE_FLUI = vitefl

Rate of flow of the fluid for the calculation of answer.

3.3   Keyword PRECISION

◊   PRECISION = prec

Precision on the rate of flow of the fluid (by default 1 E-3).

3.4   Keyword EXCIT

♦   EXCIT

Keyword factor which defines the excitation.

♦   INTE_SPEC_GENE = exc

Concept of the type interspectre, defines the interspectres of excitation (modal efforts).

3.5   Operand OPTION

◊   OPTION = 'ALL' or 'DIAG'

Argument of type text which indicates if one wants to calculate all the interspectres 'ALL' or autospectres only 'DIAG'. By default one calculates all the interspectres.

3.6   Operand TITLE

◊   TITLE = title

Argument of type text defining the title attached to the concept interspectre at exit.