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.
2 Syntax

tinsp [interspectre] = DYNA_SPEC_MODAL (  

    ♦ BASE_ELAS_FLUI = bef,
      [melasflu]
    ♦ VITE_FLUI = vitefl
      [R]

    ◊ PRECISION = / 1.E-3
        / prec
      [DEFECT]
    ◊ EXCIT = _F (  
        ♦ INTE_SPEC_GENE = exc ,
          [interspectre]
    
    ◊ OPTION = / ‘ALL’
        / ‘DIAG’,
      [DEFECT]
    ◊ TITLE = title,
      [TXM]

    );
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.