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## Operator DYNA\_SPEC\_MODAL

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### 1 Goal

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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

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```
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]  
  
  ) ;
```

## 3 Operands

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### 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.