Moris Parameter

Documentation

Everyone

November 3, 2023

Contents

Todo list

0.0.1 HMR Parameter-List

`adaptive_refinement_level` **(0.0.1.1)**

Default	`0`	Type	–
See also	–	Usage	–

- no description -

`additional_lagrange_refinement` **(0.0.1.2)**

Default	`0`	Type	–
See also	–	Usage	–

- no description -

`basis_function_vtk_file` **(0.0.1.3)**

Default	`""`	Type	–
See also	–	Usage	–

- no description -

bspline_orders **(0.0.1.4)**

Default	`"1"`	Type	`vector`
See also	bspline_pattern	Usage	once

Orders of the B-Spline meshes. If you use multiple meshes, separate the orders with a comma. E.g. `"2,1"` for a quadratic and a linear mesh. Use bspline_pattern in this case to specify the pattern for each mesh.

bspline_pattern **(0.0.1.5)**

Default	`"0"`	Type	`vector`
See also	bspline_orders	Usage	once

Specify the patterns for the B-Spline meshes. If you use multiple meshes, separate the patterns with a comma. Use in conjunction with bspline_orders.

domain_dimensions **(0.0.1.6)**

Default	`"1, 1"`	Type	–
See also	–	Usage	–

Width, height and depth of domain (without aura)

domain_offset **(0.0.1.7)**

Default	`"0, 0"`	Type	`vector`
See also	–	Usage	once

Offset from the origin. For a 3D problem, use `"0, 0, 0"`.

domain_sidesets **(0.0.1.8)**

Default	`""`	Type	–
See also	–	Usage	–

Set all side-set names that should be built for the domain. Numbering of side-sets follows the convention of [1]. To obtain all side-sets, use `"1, 2, 3, 4"` in a 2D problem and `"1, 2, 3, 4, 5, 6"` in a 3D problem.

initial_refinement **(0.0.1.9)**

Default	`"0"`	Type	`scalar`
See also	initial_refinement_pattern	Usage	once

Initial refinement level.

initial_refinement_pattern **(0.0.1.10)**

Default	`"0"`	Type	`scalar`
See also	initial_refinement	Usage	once

What does it do?

lagrange_input_meshes **(0.0.1.11)**

Default	`""`	Type	–
See also	–	Usage	–

- no description -

lagrange_orders **(0.0.1.12)**

Default	`"1"`	Type	`scalar`
See also	–	Usage	once

Order of Lagrange elements. Use `"1"` for linear elements, `"2"` for quadratic elements, etc.

lagrange_output_mesh_names **(0.0.1.13)**

Default	`""`	Type	`vector`
See also	–	Usage	once

Lagrange Meshes that are used as output meshes. This is usually set to `"0"`.

What does this mean?

lagrange_output_meshes **(0.0.1.14)**

Default	`""`	Type	–
See also	–	Usage	–

- no description -

lagrange_pattern **(0.0.1.15)**

Default	`"0"`	Type	–
See also	–	Usage	–

Set the Lagrange pattern (see **??**).

lagrange_to_bspline **(0.0.1.16)**

Default	`"0"`	Type	–
See also	–	Usage	–

Defines which B-Spline mesh is associated with which Lagrange mesh. If you have multiple B-Spline meshes, separate the indices with a comma. E.g. use `"0,1"` to match

To do what??

max_refinement_level **(0.0.1.17)**

Default	`-1`	Type	–
See also	–	Usage	–

- no description -

number_of_elements_per_dimension **(0.0.1.18)**

Default	`"2, 2"`	Type	`vector`
See also	–	Usage	once

Number of elements per direction in overall mesh, without aura 2D or 3D is determined by length of this vector.

processor_decomposition_method **(0.0.1.19)**

Default	`1`	Type	–
See also	–	Usage	–

- no description -

processor_dimensions **(0.0.1.20)**

Default	`"2, 2"`	Type	–
See also	–	Usage	–

- no description -

refinement_buffer **(0.0.1.21)**

Default	`0`	Type	`scalar`
See also	staircase_buffer	Usage	once

Size of the refinement buffer.

What is that?

refinement_function_names **(0.0.1.22)**

Default	`""`	Type	–
See also	–	Usage	–

- no description -

renumber_lagrange_nodes **(0.0.1.23)**

Default	`0`	Type	–
See also	–	Usage	–

- no description -

restart_refinement_pattern_file **(0.0.1.24)**

Default	`""`	Type	–
See also	–	Usage	–

- no description -

severity_level **(0.0.1.25)**

Default	`0`	Type	`scalar`
See also	–	Usage	once

Set the severity level for the Moris output.

staircase_buffer **(0.0.1.26)**

Default	`0`	Type	`scalar`
See also	refinement_buffer	Usage	once

Size of the staircase buffer. Often set to the same value as refinement_buffer.

What is that?

truncate_bsplines **(0.0.1.27)**

Default	`1`	Type	`boolean`
See also	–	Usage	once

Whether to truncate the B-Spline meshes or not.

union_pattern **(0.0.1.28)**

Default	`6`	Type	–
See also	–	Usage	–

- no description -

use_advanced_T_matrix_scheme **(0.0.1.29)**

Default	`0`	Type	–
See also	–	Usage	–

- no description -

use_multigrid **(0.0.1.30)**

Default	`0`	Type	`boolean`
See also	–	Usage	once

Boolean flag for multigrid.

What is that?

use_number_aura **(0.0.1.31)**

Default	`1`	Type	`boolean`
See also	–	Usage	once

Boolean flag for numbering of aura.

What is that?

use_refine_low_level_elements **(0.0.1.32)**

Default	`false`	Type	–
See also	–	Usage	–

- no description -

use_refinement_interrelation **(0.0.1.33)**

Default	`0`	Type	–
See also	–	Usage	–

- no description -

working_pattern **(0.0.1.34)**

Default	`7`	Type	–
See also	–	Usage	–

- no description -

write_background_mesh **(0.0.1.35)**

Default	`""`	Type	–
See also	–	Usage	–

- no description -

write_lagrange_output_mesh **(0.0.1.36)**

Default	`""`	Type	–
See also	–	Usage	–

- no description -

`write_lagrange_output_mesh_to_exodus` **(0.0.1.37)**

Default	`""`	Type	–
See also	–	Usage	–

- no description -

`write_refinement_pattern_file` **(0.0.1.38)**

Default	`false`	Type	–
See also	–	Usage	–

- no description -

Bibliography

[1] *Exodus: Exodus Element Types*. URL: https://sandialabs.github.io/seacas-docs/html/element_types.html (visited on 11/03/2023).

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