

Gauss-Lobatto distribution

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Description:

Symmetric function with an extremum.
Cell size is refined at left and right tips of the segment.

Namelist:

```
&MESH_FUNCTION_DATA  Function_Name="GAUSS_LOBATTO"  ,
                        Number_of_Cells= 32   Length= 1.0
                        Reverse_Ordering= .false.  /
```

Cell size distribution $h(l)$:

L is the Length

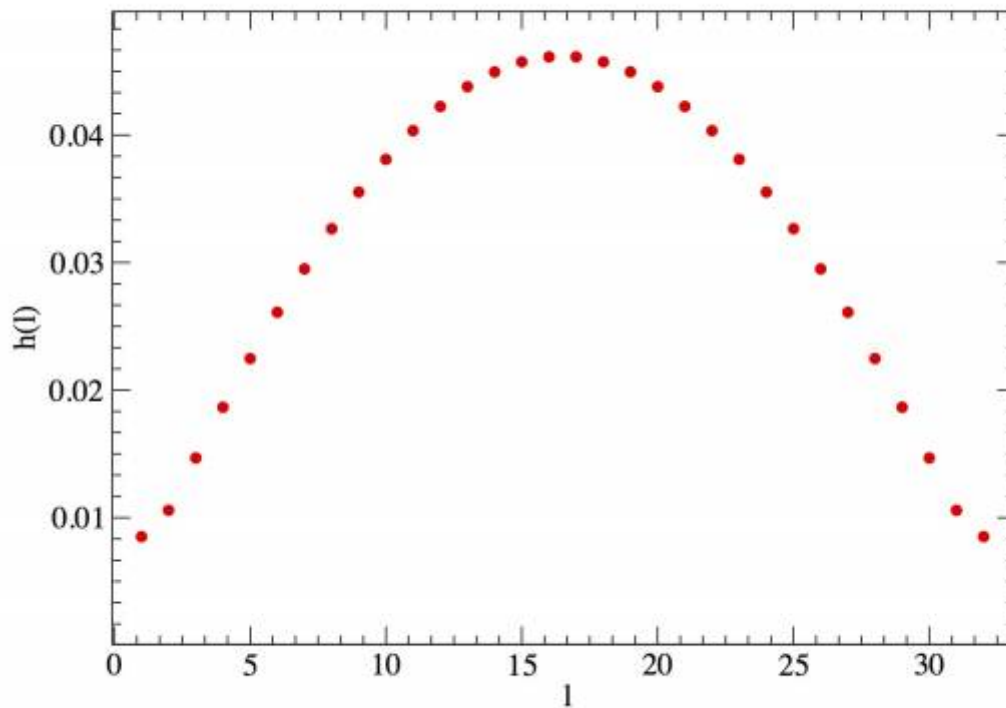
N is the Number_of_Cells

$x(l)$ is the coordinate.

$h(l)$ is the cell size.

$$\begin{aligned} x(l) &= \frac{1}{2}L(1 - \cos(\frac{l-1}{N}\pi)), \quad 1 \leq l \leq N+1 \\ h(l) &= x(l+1) - x(l) \end{aligned}$$

l is the cell index.



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