

Gauss-Legendre Rule

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Chapter 1

Namespace Index

1.1 Namespace List

Here is a list of all namespaces with brief descriptions:

GaussLegendre	7
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Chapter 2

Class Index

2.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

GaussLegendre::NotComputed	9
GaussLegendre::PreComputed	9

Chapter 3

File Index

3.1 File List

Here is a list of all files with brief descriptions:

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Chapter 4

Namespace Documentation

4.1 GaussLegendre Namespace Reference

Classes

- class [PreComputed](#)
- class [NotComputed](#)

Chapter 5

Class Documentation

5.1 GaussLegendre::NotComputed Class Reference

Public Member Functions

- [NotComputed](#) (int n)
- GaussLegendrePoint [getGaussLegendrePoint](#) ()

5.1.1 Detailed Description

Purpose: Calculates the nodes and weights for a Gauss-Legendre quadrature rule for any (reasonable) order n.

5.1.2 Constructor & Destructor Documentation

5.1.2.1 GaussLegendre::NotComputed::NotComputed (int *n*)

5.1.3 Member Function Documentation

5.1.3.1 GaussLegendrePoint GaussLegendre::NotComputed::getGaussLegendrePoint ()

The documentation for this class was generated from the following file:

- [src/GaussLegendreRule.cpp](#)

5.2 GaussLegendre::PreComputed Class Reference

Public Member Functions

- [PreComputed](#) (int n)
- GaussLegendrePoint [getGaussLegendrePoint](#) ()

5.2.1 Detailed Description

Purpose: Contains pre-computed n-point Gauss-Legendre Quadrature nodes/weights over the interval (-1,1).

5.2.2 Constructor & Destructor Documentation

5.2.2.1 GaussLegendre::PreComputed::PreComputed (int n)

5.2.3 Member Function Documentation

5.2.3.1 GaussLegendrePoint GaussLegendre::PreComputed::getGaussLegendrePoint ()

The documentation for this class was generated from the following file:

- [src/GaussLegendreRule.cpp](#)

Chapter 6

File Documentation

6.1 src/GaussLegendreRule.cpp File Reference

```
#include <map>
#include <cmath>
#include <limits>
#include <string>
#include "GaussLegendreRule.hpp"
```

Classes

- class [GaussLegendre::PreComputed](#)
- class [GaussLegendre::NotComputed](#)

Namespaces

- [GaussLegendre](#)

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