

## Dual Degree Project

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# Chapter 1

## My Personal Index Page

### 1.1 Introduction

This is the introduction.

### 1.2 Installation

#### 1.2.1 Step 1: Opening the box

etc...



## **Chapter 2**

# **DDP2**

C++ 3D, High Speed, and multiphase fluid flow solver





## Chapter 3

# Bug List

### **Class `diffusionfluxinterface`**

Not all memory is freed when deleting an object of this class.

### **Class `netfluxinterface`**

Not all memory is freed when deleting an object of this class.



## Chapter 4

# Class Index

### 4.1 Class List

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

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## Chapter 5

# File Index

### 5.1 File List

Here is a list of all documented files with brief descriptions:

<a href="#">BC.h</a>		
	A Documented file . . . . .	<a href="#">17</a>
<b>deltat.h</b>	. . . . .	??
<b>diffusionfluxinterface.h</b>	. . . . .	??
<b>dt.h</b>	. . . . .	??
<b>eulerflux.h</b>	. . . . .	??
<b>grid_diverging_duct.h</b>	. . . . .	??
<b>grid_nozzle.h</b>	. . . . .	??
<b>interface.h</b>	. . . . .	??
<b>netfluxinterface.h</b>	. . . . .	??



# Chapter 6

## Class Documentation

### 6.1 diffusionfluxinterface Class Reference

Pretty nice class.

```
#include <diffusionfluxinterface.h>
```

#### Public Member Functions

- [diffusionfluxinterface](#) (vector< double > &vectorleftminus, vector< double > &vectorleft, vector< double > &vectorright, vector< double > &vectorrightplus, vector< double > &areavectorleft, vector< double > &areavectorright, vector< double > &areavectorrightplus, double volumeleftmins, double volumeleft, double volumeright, double volumerightplus, double deltat)

#### Public Attributes

- double **diffusionfluxvector** [5]

#### 6.1.1 Detailed Description

Pretty nice class.

This class is used to demonstrate a number of section commands.

#### Author

John Doe  
Jan Doe

#### Version

4.1a

**Date**

1990-2011

**Precondition**

First initialize the system.

**Bug** Not all memory is freed when deleting an object of this class.**Warning**

Improper use can crash your application

**Copyright**

GNU Public License.

**6.1.2 Constructor & Destructor Documentation**

**6.1.2.1** `diffusionfluxinterface::diffusionfluxinterface ( vector< double > & vectorleftminus, vector< double > & vectorleft, vector< double > & vectorright, vector< double > & vectorrightplus, vector< double > & areavectorleft, vector< double > & areavectorright, vector< double > & areavectorrightplus, double volumeleftmins, double volumeleft, double volumeright, double volumerightplus, double deltat ) [inline]`

&lt; Detailed description after the member

&lt; enum value 1

A pure virtual member.

**See also**

testMe()

**Parameters**

<i>c1</i>	the first argument.
<i>c2</i>	the second argument.

A list of events:

- mouse events

1. The distance between  $(x_1, y_1)$  and  $(x_2, y_2)$  is  $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$ .
2. mouse move event
3. mouse click event  
More info about the click event.



4. mouse double click event

- keyboard events

1. [link text](#)

2. key up event

1. [link text](#)

More text here.

Table 6.2 Complex table

Column 1	Column 2	Column 3
cell row=1+2,col=1	cell row=1,col=2	cell row=1,col=3
	cell row=2+3,col=2	cell row=2,col=3
cell row=3,col=1		cell row=3+4,col=3
cell row=4,col=1+2		
cell row=5,col=1	cell row=5,col=2+3	
cell row=6+7,col=1+2		cell row=6,col=3
		cell row=7,col=3
cell row=8,col=1	cell row=8,col=2	
	Inner cell row=1,col=1	Inner cell row=1,col=2
	Inner cell row=2,col=1	Inner cell row=2,col=2
	• Item 1  • Item 2	

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

- diffusionfluxinterface.h

## 6.2 eulerflux Class Reference

### Public Member Functions

- **eulerflux** (vector< double > &vector)

### Public Attributes

- double **xeulerflux** [5]
- double **yeulerflux** [5]
- double **zeulerflux** [5]

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

- eulerflux.h

## 6.3 interface Class Reference

### Public Member Functions

- **interface** (vector< double > &vectorleft, vector< double > &vectorright, vector< double > &areavectorinterface, double volumeleft, double volumeright, double deltat)

### Public Attributes

- double **densityinterface**
- double **xvelocityinterface**
- double **yvelocityinterface**
- double **zvelocityinterface**
- double **enthalpyinterface**
- double **vectorjumpinterface** [5]
- double **eigenvalue** [5]
- double **eigenvectormatrix** [5][5]
- double **eigenvectormatrixinvers** [5][5]
- double **alphavectorinterface** [5]
- double **muvectorinterface** [5]
- double **Zvectorinterface** [5]
- double **pshivectorinterface** [5]
- double **gvectorinterface** [5]

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

- interface.h

## 6.4 netfluxinterface Class Reference

Pretty nice class.

```
#include <netfluxinterface.h>
```

### Public Member Functions

- **netfluxinterface** (vector< double > &vectorleftminus, vector< double > &vectorleft, vector< double > &vectorright, vector< double > &vectorrightplus, vector< double > &areavectorleft, vector< double > &areavectorright, vector< double > &areavectorrightplus, double volumeleftmins, double volumeleft, double volumeright, double volumerightplus, double deltat)

### Public Attributes

- double **netflux** [5]

### 6.4.1 Detailed Description

Pretty nice class.

This class is used to demonstrate a number of section commands.

#### Author

John Doe  
Jan Doe

#### Version

4.1a

#### Date

1990-2011

#### Precondition

First initialize the system.

**Bug** Not all memory is freed when deleting an object of this class.

#### Warning

Improper use can crash your application

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### 6.4.2 Constructor & Destructor Documentation

**6.4.2.1** `netfluxinterface::netfluxinterface ( vector< double > & vectorleftminus, vector< double > & vectorleft, vector< double > & vectorright, vector< double > & vectorrightplus, vector< double > & areavectorleft, vector< double > & areavectorright, vector< double > & areavectorrightplus, double volumeleftmins, double volumeleft, double volumeright, double volumerightplus, double deltat ) [inline]`

< Detailed description after the member

< [out] docs for input parameter v.

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

- netfluxinterface.h

## 6.5 Test Class Reference

This is a test class.

### 6.5.1 Detailed Description

This is a test class.

Some details about the [Test](#) class.

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

- eulerflux.h



## Chapter 7

# File Documentation

### 7.1 BC.h File Reference

A Documented file.

```
#include "iostream"  
#include "math.h"  
#include <vector>
```

Include dependency graph for BC.h:



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