

Help

```

#if defined(PremiaCurrentVersion) && PremiaCurrentVersion < (2008+2) //The "#els
#else
/*****
*   CPS - A simple C PDE solver                                     *
*                                                                 *
*   Copyright (c) 2007,                                           *
*   Maya Briani          <m.briani@iac.rm.cnr.it>,               *
*   Francesco Ferreri    <francesco.ferreri@gmail.com>,          *
*   Roberto Natalini     <r.natalini@iac.rm.cnr.it>,              *
*   Marco Papi           <m.papi@iac.rm.cnr.it>                   *
*                                                                 *
*****/
#ifndef ASSERTIONS_H
#define ASSERTIONS_H

#include <math.h>
#include "laspack/errhandl.h"
#include "cps_debug.h"

#define OK 0
#define ERR -1

#ifdef ASSERT_ALL
#define ASSERT_PRE 1
#define ASSERT_POST 1
#define ASSERT_CHECK 1
#else
#define ASSERT_PRE 0
#define ASSERT_POST 0
#define ASSERT_CHECK 0
#endif

#define IMPLIES(X,Y) ((!(X)) || (Y))
#define NOT(X) !(X)

typedef enum
{
    assert_require, assert_ensure, assert_check
} assert_type;

```

```

#if ASSERT_PRE != 0
#define REQUIRE(tag,cond) \
if(!(cond)){ \
assertion_callback(assert_require, __FILE__, __LINE__, __func__, tag, #cond, NULL) \
}
#else
#define REQUIRE(tag,cond)
#endif

#if ASSERT_POST != 0
#define ENSURE(tag,cond) \
if(!(cond)){ \
assertion_callback(assert_ensure, __FILE__, __LINE__, __func__, tag, #cond, NULL) \
}
#else
#define ENSURE(tag,cond)
#endif

#if ASSERT_CHECK != 0
#define CHECK(tag,cond) \
if(!(cond)){ \
assertion_callback(assert_check, __FILE__, __LINE__, __func__, tag, #cond, NULL) \
}

#define CHECK_LASPACK(tag) \
if (LASResult() != LASOK) { \
WriteLASErrDescr(stderr); \
assertion_callback(assert_check, __FILE__, __LINE__, __func__, tag, "(LASPACK failed)", NULL) \
}
#else
#define CHECK(tag,cond)
#define CHECK_LASPACK(tag)
#endif

#define APPROX_EQUAL(x,y,t) abs((x-y) < t)

void assertion_callback(assert_type, const char *, int, const char *, const char *)

```

```
#endif
```

```
#endif //PremiaCurrentVersion
```