

[Help](#)

```
#ifndef __carr__
#define __carr__

#include "tool_box.h"
#include "finance_tool_box.h"
#include "levy_process.h"
#include "levy_diffusion.h"
#include "pnl/pnl_complex.h"

extern int CarrMethod_VectStrike(PnlVect *K,
                                PnlVect * Price,
                                double S0,
                                double T,
                                double Kstep,
                                double CallPut,
                                double r,
                                double divid,
                                double sigma,
                                void * Model,
                                dcomplex (*ln_phi)(dcomplex
ex u,double t,void * model)
                                );

extern int CarrMethod_onStrikeList(PnlVect *K,
                                PnlVect * Price,
                                double S0,
                                double T,
                                double CallPut,
                                double r,
                                double divid,
                                double sigma,
                                Levy_diffusion * Model);

extern int CarrMethod(double S0,
                    double T,
                    double K,
                    double CallPut,
                    double r,
                    double divid,
                    double sigma,
```

```

        //Levy_diffusion * Model,
        void * Model,
        dcomplex (*ln_phi)(dcomplex u,double
t,void * model),
        double *ptprice,
        double *ptdelta);

extern int CarrMethod_Vanilla_option(Option_Eqd *opt,
        double sigma,
        Levy_process * Model);

extern int CarrMethod_Vanilla_option_LD(Option_Eqd *opt,
        double sigma,
        Levy_diffusion *
        Model);

extern int AttariMethod_Vanilla_option(Option_Eqd *opt,
        double sigma,
        Levy_process *
        Model);

extern int AttariMethod_Vanilla_option_LD(Option_Eqd *opt,
        double sigma,
        Levy_diffusion *
        Model);

extern int Var_Swap_Price_option(Option_Eqd *opt,
        Levy_process * Model);
extern int Var_Swap_Price_option_LD(Option_Eqd *opt,
        Levy_diffusion * Model);

#endif

```

References