```
   Help
extern "C"{
#include "temperedstable1d_std.h"
}

#include "math/numerics.h"
#include "math/fft.h"

extern "C"{


  static const int step=1;
  static const double xmax=1.6;
  static const double xmin=-1.2;
  static const double eps=1e-004;
  //static const double er=1e-008;
  //static const double minaccur=1e-008;
  static const double hh=0.002;
  /*static char *pfname="iprices.dat";
   static char *ebfname="iearly.dat";
   static char *pftitle="Option prices {n Spot {t Option
    Price{n";
   static char *ebftitle="Early exercise boundaries {n
    Time {t Boundary{n";*/

#if defined(PremiaCurrentVersion) && PremiaCurrentVersion <
     (2008+2) //The "#else" part of the code will be freely av
    ailable after the (year of creation of this file + 2)
static int CHK_OPT(FD_KLZ_EPUT)(void *Opt, void *Mod)
{
  return NONACTIVE;
}
int CALC(FD_KLZ_EPUT)(void *Opt,void *Mod,PricingMethod *
    Met)
{
return AVAILABLE_IN_FULL_PREMIA;
}
#else

  static double intlp(long k, double lp, double h, double
    nu,
```

```
                    double c, double er);
static double intlp0(long k, double lp, double h, double
  nu,
                     double c, double er);
static double intlp1(long k, double lp, double h, double
  nu,
                     double c, double er);
static double intlpp(long k, double lp, double h, double
  nu,
                     double c, double er);
static void fillarray(double *v1, double *v2, long int N)
  ;
static void confft(double *creal, double *cimage, double
  *v,
                   double *vreal, double *vimage, double
  *res,
                   double *resimage, long int n, long
  int m, long int Nbin, int d);
static void strike_correct(double strike, double *zz,
                           long int N, int islog);
/*static void printoutDA(PnlVect *ptDA1, PnlVect *ptDA2,
 char *foutname, char *strtitle);*/
/*////////////////////////////////////////////////////*/
static int fds_ts_europut(double lm, double lp,
                          double alpha_plus,double alpha_
  minus, double c_plus,
                          double c_minus,
                          double r, double divid,
                          double T, double h, double Stri
  ke,
                          double Spot,
                          double eps, long errr, int step
  ,
                          double *Price)
{
  double *t, *y, *HH, *v1, *payoff;
  long int N1, Nx, Ns, Nf, Nbin;
  double *v2;
  double *v3;
  double *tmp, *ureal, *uimage, *zreal, *zimage;
  double *vreal, *vimage, *tmpimage;
```

```
PnlVect *TP, *EEB, *SP, *PP;

double *cp,  *cm, *p, *cmm, *cpp, *ccm, *ccp,*alp,*alm;
long int *Lm;
double a2=0.;
double er, minaccur;

double logSpot;

double lpnu=exp(alpha_plus*log(lp));
double lmnu=exp(alpha_minus*log(lm));
double gamma_plus=tgamma(-alpha_plus);
double gamma_minus=tgamma(-alpha_minus);

double Am=-log(eps/c_minus/lmnu)/lm;
double Ap=-log(eps/c_plus/lpnu)/lp;
double mA=Ap>Am ? Ap :Am;

long int j, L;
long int kmax=(long int)ceil(mA/h);


//!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!!!!!
double mu=r-divid+c_minus*gamma_minus*(lmnu-exp(alpha_
minus*log(lm+1)))+c_plus*gamma_plus*(lpnu-exp(alpha_plus*
log(lp-1)));

//!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!!!!!!!

Ns=(long int)ceil((xmax-xmin)/h);
long int Nmax=Ns+kmax;
Nf=Nmax+kmax;
long int N0=(long int)ceil(-xmin/h)+kmax;
Nbin=2;
while(Nbin<Nf) Nbin*=2;
long int k;
double accur;
double dt;
```

```
double sum_m;
double sum_p;
double cc00;

Nx=Nmax; /*number of space points*/

/*Memory allocation for space grid*/

cp=(double *)calloc(kmax+1,sizeof(double));
if (cp==NULL)
  return MEMORY_ALLOCATION_FAILURE;
cm=(double *)calloc(kmax+1,sizeof(double));
if (cm==NULL)
  return MEMORY_ALLOCATION_FAILURE;
cpp=(double *)calloc(kmax+1,sizeof(double));
if (cpp==NULL)
  return MEMORY_ALLOCATION_FAILURE;
cmm=(double *)calloc(kmax+1,sizeof(double));
if (cmm==NULL)
  return MEMORY_ALLOCATION_FAILURE;
ccp=(double *)calloc(kmax+1,sizeof(double));
if (ccp==NULL)
  return MEMORY_ALLOCATION_FAILURE;
ccm=(double *)calloc(kmax+1,sizeof(double));
if (ccm==NULL)
  return MEMORY_ALLOCATION_FAILURE;
alp=(double *)calloc(kmax+1,sizeof(double));
if (alp==NULL)
  return MEMORY_ALLOCATION_FAILURE;
alm=(double *)calloc(kmax+1,sizeof(double));
if (alm==NULL)
  return MEMORY_ALLOCATION_FAILURE;
ureal=(double *)calloc(Nbin,sizeof(double));
if (ureal==NULL)
  return MEMORY_ALLOCATION_FAILURE;
uimage=(double *)calloc(Nbin,sizeof(double));
if (uimage==NULL)
  return MEMORY_ALLOCATION_FAILURE;
zreal=(double *)calloc(Nbin,sizeof(double));
if (zreal==NULL)
  return MEMORY_ALLOCATION_FAILURE;
```

```
zimage=(double *)calloc(Nbin,sizeof(double));
if (zimage==NULL)
  return MEMORY_ALLOCATION_FAILURE;
y=(double *)calloc(Nmax+1,sizeof(double)); /*space
grid points*/
if (y==NULL)
  return MEMORY_ALLOCATION_FAILURE;
payoff=(double *)calloc(Nmax+1,sizeof(double));
if (payoff==NULL)
  return MEMORY_ALLOCATION_FAILURE;
v1=(double *)calloc(Nmax+1,sizeof(double));/*prices at
previous time step*/
if (v1==NULL)
  return MEMORY_ALLOCATION_FAILURE;
v2=(double *)calloc(Nmax+1,sizeof(double));/*current
price*/
if (v2==NULL)
  return MEMORY_ALLOCATION_FAILURE;
v3=(double *)calloc(Nmax+1,sizeof(double));/*previous
iteration form current time step*/
if (v3==NULL)
  return  MEMORY_ALLOCATION_FAILURE;
vreal=(double *)calloc(Nbin,sizeof(double));
if (vreal==NULL)
  return MEMORY_ALLOCATION_FAILURE;
vimage=(double *)calloc(Nbin,sizeof(double));
if (vimage==NULL)
  return MEMORY_ALLOCATION_FAILURE;
tmpimage=(double *)calloc(Nbin,sizeof(double));
if (tmpimage==NULL)
  return MEMORY_ALLOCATION_FAILURE;

tmp=(double *)calloc(Nbin,sizeof(double));/*previous
iteration form current time step*/
if (tmp==NULL)
  return  MEMORY_ALLOCATION_FAILURE;
TP=(PnlVect *)calloc(1,sizeof(PnlVect));/*time grid po
ints*/
if (TP==NULL)
  return  MEMORY_ALLOCATION_FAILURE;
EEB=(PnlVect *)calloc(1,sizeof(PnlVect));/*early exerc
```

```
ise boundaries*/
if (EEB==NULL)
  return  MEMORY_ALLOCATION_FAILURE;
SP=(PnlVect *)calloc(1,sizeof(PnlVect));/*space grid po
ints*/
if (SP==NULL)
  return  MEMORY_ALLOCATION_FAILURE;
PP=(PnlVect *)calloc(1,sizeof(PnlVect));/*option prices
*/
if (PP==NULL)
  return  MEMORY_ALLOCATION_FAILURE;

/*Computation of coefficients*/
k=1;

er=eps/(Nmax+1)/3.0;

while(k<kmax)
  {
    k++;
    cp[k]=intlp(k-1, lp, h, alpha_plus, c_plus, er); /*
 coefficients for integral c_+ */
    cm[k]=intlp(k-1, lm, h, alpha_minus, c_minus, er);
/* coefficients for integral c_- */
  }
k=0;
while(k<kmax-1)
  {
    k++;
    ccp[k]=intlpp(k, lp, h, alpha_plus, c_plus, er); /*
 coefficients for integral c_{++}-c_+  */
    ccm[k]=intlpp(k, lm, h, alpha_minus, c_minus, er);
/* coefficients for integral c_{--}-c_-  */
  }

cp[1]=intlp0(0, lp, h, alpha_plus, c_plus, er);
cm[1]=intlp0(0, lm, h, alpha_minus, c_minus, er);


//!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

```
sum_p=intlp1(kmax, lp, h, alpha_plus, c_plus, er);
sum_m=intlp1(kmax, lm, h, alpha_minus, c_minus, er);

cc00=(cp[1]+sum_p)/pow(h,alpha_plus)+(cm[1]+sum_m)/pow(
h,alpha_minus);

/*number of time steps*/
N1=step*(1+(long int)ceil(3*T*(fabs(mu/h)+cc00)/2));
//!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!!!!!!!!

/*Memory allocation for time grid*/
Lm=(long int *)calloc(N1+2,sizeof(long int));
if (Lm==NULL)
  return MEMORY_ALLOCATION_FAILURE;
t=(double *)calloc(N1+2,sizeof(double)); /*time points*
/
if (t==NULL)
  return MEMORY_ALLOCATION_FAILURE;
HH=(double *)calloc(N1+2,sizeof(double));/*early exerc
ise boundaries*/
if (HH==NULL)
  return MEMORY_ALLOCATION_FAILURE;

HH[1]=N1;
Lm[1]=N0;

/*Time step*/
dt=T/N1;
t[1]=0;
t[2]=dt;


//!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!!1
if (mu>0)
  {
    a2=1+dt*(mu/h+cc00+r-divid);
  }
if (mu<=0)
  {
```

```
      a2=1+dt*(-mu/h+cc00+r-divid);
    }
  //!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
  !!!!!!!!!!!!!!!!!!


  k=0;
  while(k<kmax-1)
    {
      k++;
      alp[k]=dt*(ccp[k]+cp[k])/pow(h,alpha_plus)/a2;
      alm[k]=dt*(ccm[k]+cm[k])/pow(h,alpha_minus)/a2;
    }

  if (mu>0)
    {
      alp[1]=alp[1]+dt*mu/h/a2;
    }

  if (mu<=0)
    {
      alm[1]=alm[1]-dt*mu/h/a2;
    }
  alp[kmax]=dt*cp[kmax]/pow(h,alpha_plus)/a2;
  alm[kmax]=dt*cm[kmax]/pow(h,alpha_minus)/a2;

  for(j=0;j<kmax;j++)
    { ureal[j]=alp[kmax-j];
      uimage[j]=0;
      zreal[j]=alm[j+1];
      zimage[j]=0;
    }
  for(j=kmax;j<Nbin;j++)
    { ureal[j]=0;
      uimage[j]=0;
      zreal[j]=0;
      zimage[j]=0;
    }
  fft1d(ureal, uimage, Nbin, -1);

  fft1d(zreal, zimage, Nbin, -1);
```

```
k=0;

/*Put Pay-off function*/
for(j=0;j<N0;j++)
  {
    y[j]=(j-N0)*h;
    payoff[j]=1-exp(y[j]);
  }
for(j=N0; j<=Nx;j++)
  {
    y[j]=(j-N0)*h;
    payoff[j]=0;
  }

fillarray(v1, payoff, Nmax+1);
fillarray(v2, payoff, Nmax+1);

minaccur=eps/(N1+1)/3.0;

/*Main Loop on time grid*/
for(L=2; L<=N1+1; L++)
  {
    t[L]=t[L-1]+dt;
    //j=Lm[L-1]+2; /*early exercise boundary */
    //ereq=1;
    /* first approximation*/
    /* computation of the price to the left to the boun
dary */


    /*computation of the price to the right */
    confft(ureal, uimage, v1, vreal, vimage, tmp, tmpi
mage, Ns, kmax, Nbin, 1);
    v2[1]=v1[1]/a2+tmp[0];
    for(j=2;j<=Nmax;j++)
      {
        v2[j]=v1[j]/a2+tmp[j-1];
      }
```

```
    confft(zreal, zimage, v1, vreal, vimage, tmp, tmpi
mage, Ns, kmax, Nbin, -1);
    v2[1]+=tmp[Nbin-1];
    for(j=2;j<=Nmax;j++)
      {
        v2[j]+=tmp[j-2];
      }


    fillarray(v3, v2, Nmax+1);

    /*Iterative solution for prices*/
    accur=0;

    /*computation of residual*/
    for(j=1;j<=Nmax;j++)
      {
        if (fabs(v1[j]-v2[j])>accur)
          {
            accur=fabs(v1[j]-v2[j]);
          }
      }

    /* iterative computation of price */
    while (accur>minaccur)
      {
        accur=0;
        //j=Lm[L-1]+2;
        //ereq=1;

        /* computation of the price to the left to the
boundary */

        /* computation of the price to the right */

        confft(ureal, uimage, v3, vreal, vimage, tmp,
tmpimage, Ns, kmax, Nbin, 1);
        v2[1]=v1[1]/a2+tmp[0];
        for(j=2;j<=Nmax;j++)
          {
            v2[j]=v1[j]/a2+tmp[j-1];
```

```
          }

        confft(zreal, zimage, v3, vreal, vimage, tmp,
tmpimage, Ns, kmax, Nbin, -1);
        v2[1]+=tmp[Nbin-1];
        for(j=2;j<=Nmax;j++)
          {
            v2[j]+=tmp[j-2];
            if (fabs(v2[j]-v3[j])>accur)
              {
                accur=fabs(v2[j]-v3[j]);
              }
          }


        fillarray(v3, v2, Nmax+1);

      }
    p=v1;
    v1=v2;
    v2=p;
  }

/*Memory desallocation*/
free(cp);
free(cm);
free(cpp);
free(cmm);
free(ccp);
free(ccm);
free(alp);
free(alm);
free(v2);
free(v3);
free(Lm);
free(vreal);
free(vimage);
free(tmp);
free(tmpimage);
free(ureal);
free(uimage);
```

```
  free(zreal);
  free(zimage);

  logSpot=log(Spot/Strike);
  j=(long int)ceil((logSpot-xmin)/h)+kmax;

  strike_correct(Strike, y, Nx+1, 1);
  strike_correct(Strike, v1, Nx+1, 0);
  strike_correct(Strike, HH, N1+1, 0);


  *Price=(Spot-y[j])/(y[j+1]-y[j])*(v1[j+1]-v1[j])+v1[j];

  //  SP->size=Nx+1;
  //  SP->array=y;
  //  PP->size=Nx+1;
  //  PP->array=v1;
  TP->size=N1+1;
  TP->array=t;
  EEB->size=N1+1;
  EEB->array=HH;

  //printf("Look 'iprices.dat' for results{n");
  //  printoutDA(SP, PP, pfname, pftitle);

  return OK;
}
/*////////////////////////////////////////////////*/
static void confft(double *creal, double *cimage, double
  *v,
                   double *vreal, double *vimage, double
  *res,
                   double *resimage, long int n, long
  int m, long int Nbin, int d)
{

  long int Nz=Nbin-n-m-m;
  long int j;


  if(d>0)
```

```
    {
      for(j=0; j<n; j++)
        {    vreal[j]=v[m+j+1];
          vimage[j]=0;
        }
      for(j=n; j<n+m+Nz; j++)
        {    vreal[j]=0;
          vimage[j]=0;
        }
      for(j=1; j<m+1; j++)
        {    vreal[n+m+Nz-1+j]=v[j];
          vimage[n+m+Nz-1+j]=0;
        }
    }
  else
    {
      for(j=0;j<n+m; j++)
        {    vreal[j]=v[j+1];
          vimage[j]=0;
        }
      for(j=n+m; j<Nbin; j++)
        {    vreal[j]=0;
          vimage[j]=0;
        }
    }

  fft1d(vreal, vimage, Nbin, -1);

  for(j=0; j<Nbin; j++)
    {    res[j]=creal[j]*vreal[j]-cimage[j]*vimage[j];
      resimage[j]=cimage[j]*vreal[j]+creal[j]*vimage[j];
    }
  fft1d(res, resimage, Nbin, 1);
}

/*////////////////////////////////////////////////*/
static void fillarray(double *v1, double *v2, long int N)
{
  long int j;
  for(j=0;j<N;j++)
    v1[j]=v2[j];
```

```
}

/*////////////////////////////////////////////////////*/
static void strike_correct(double strike, double *zz, lon
  g int N, int islog)
{
  long int j;
  if (islog)
    for(j=0;j<N;j++)
      zz[j]=strike*exp(zz[j]);
  else
    for(j=0;j<N;j++)
      zz[j]=strike*zz[j];

}

/*////////////////////////////////////////////////////*/
static double intlp(long k, double lp, double h, double
  nu,
                    double c, double er)
{
  double err=1;
  long int j, n=1;
  double st=0.5;
  double w, s1, s2, v1, v2, res;
  s1=exp(-lp*(k+1)*h)*pow(k+1, -1-nu);
  s2=exp(-lp*(k+st)*h)*pow(k+st, -1-nu)*st;
  v2=st*(s1+4.0*s2)/3.0;
  v1=0;

  n=2;

  while(err>er)
    {
      v1=v2;
      s1+=2.0*s2;
      s2=0;
      w=k+st/2.0;
      for(j=1;j<=n;j++)
        {
          s2+=exp(-lp*w*h)*pow(w,-1-nu)*(w-k);
```

```
          w+=st;
        }
      st=st/2.0;
      n=n*2;
      v2=st*(s1+4.0*s2)/3.0;
      err=v2>0?fabs((v1-v2)/v2):1;
      if(n>1200000) err=er/2.0;


    }

  res=c*v2;
  return res;
}

/*////////////////////////////////////////////////////*/
static double intlp0(long k, double lp, double h, double
  nu,
                     double c, double er)
{
  double err=1;
  long int j, n=1;
  double st=0.5;
  double w, s1, s2, v1, v2, res;
  s1=exp(-lp*h);
  s2=exp(-lp*st*h)*pow(st, 3-nu);
  v2=st*(s1+4.0*s2)/3.0;
  v1=0;

  n=2;

  while(err>er)
    {
      v1=v2;
      s1+=2.0*s2;
      s2=0;
      w=st/2.0;
      for(j=1;j<=n;j++)
        {
          s2+=exp(-lp*w*h)*pow(w,3-nu);
          w+=st;
```

```
        }
      st=st/2.0;
      n=n*2;
      v2=st*(s1+4.0*s2)/3.0;
      err=v2>0?fabs((v1-v2)/v2):1;
      if(n>1200000) err=er/2.0;


    }

  res=c*(v2*pow(lp*h,3)/(2-nu)/(3-nu)/(1-nu)+exp(-lp*h)*(
  1+lp*h/(2-nu)+pow(lp*h,2)/(2-nu)/(3-nu))/(1-nu));
  return res;
}

/*////////////////////////////////////////////////*/
static double intlpp(long k, double lp, double h, double
  nu,
                     double c, double er)
{
  double err=1;
  long int j, n=1;
  double st=0.5;
  double w, s1, s2, v1, v2, res;
  s1=exp(-lp*k*h)*pow(k, -1-nu);
  s2=exp(-lp*(k+st)*h)*pow(k+st, -1-nu)*0.5;
  v2=st*(s1+4.0*s2)/3.0;
  v1=0;

  n=2;

  while(err>er)
    {
      v1=v2;
      s1+=2.0*s2;
      s2=0;
      w=k+st/2.0;
      for(j=1;j<=n;j++)
        {
          s2+=exp(-lp*w*h)*pow(w,-1-nu)*(k+1-w);
          w+=st;
```

```
        }
      st=st/2.0;
      n=n*2;
      v2=st*(s1+4.0*s2)/3.0;
      err=v2>0?fabs((v1-v2)/v2):1;
      if(n>1200000) err=er/2.0;


    }

  res=c*v2;
  return res;
}

/*////////////////////////////////////////////////////*/
static double intlp1(long k, double lp, double h, double
  nu,
                     double c, double er)
{
  double err=1;
  long int j, n=1;
  double st=(k-1)*0.5;
  double w, s1, s2, v1, v2, res;
  s1=exp(-lp*h)+exp(-lp*k*h)*pow(k,-1-nu);
  s2=exp(-lp*(1+st)*h)*pow(1+st, -1-nu);
  v2=st*(s1+4.0*s2)/3.0;
  v1=0;

  n=2;

  while(err>er)
    {
      v1=v2;
      s1+=2.0*s2;
      s2=0;
      w=1+st/2.0;
      for(j=1;j<=n;j++)
        {
          s2+=exp(-lp*w*h)*pow(w,-1-nu);
          w+=st;
        }
```

```
        st=st/2.0;
        n=n*2;
        v2=st*(s1+4.0*s2)/3.0;
        err=v2>0?fabs((v1-v2)/v2):1;
        if(n>1200000) err=er/2.0;


      }

   res=c*v2;
   return res;
}
/*////////////////////////////////////////////*/

/*////////////////////////////////////////////*/
/*static void printoutDA(PnlVect *ptDA1, PnlVect *ptDA2,
   char *foutname, char *strtitle)
 {

 FILE *fic;
 long int i, nn;
 double *ptd1, *ptd2;

 if((fic = fopen(foutname,"w")) == NULL)
 {
 printf("Unable to open output File %s{n",foutname);
 return;
 }

 nn=ptDA1->size;
 ptd1=ptDA1->array;
 ptd2=ptDA2->array;
 fprintf(fic, "%s", strtitle);
 i=2;
 do
 {
 fprintf(fic, "%f {t%f {n",ptd1[i], ptd2[i]);
 i++;
 }while(i<nn);

 fclose(fic);
```

```
 }*/

/*////////////////////////////////////////////*/

int CALC(FD_KLZ_EPUT)(void *Opt,void *Mod,PricingMethod *
  Met)
{
  TYPEOPT* ptOpt=(TYPEOPT*)Opt;
  TYPEMOD* ptMod=(TYPEMOD*)Mod;
  double r, divid, strike, spot;
  NumFunc_1 *p;

  r=log(1.+ptMod->R.Val.V_DOUBLE/100.);
  divid=log(1.+ptMod->Divid.Val.V_DOUBLE/100.);
  p=ptOpt->PayOff.Val.V_NUMFUNC_1;
  strike=p->Par[0].Val.V_DOUBLE;
  spot=ptMod->S0.Val.V_DOUBLE;

  return fds_ts_europut(
    ptMod->LambdaMinus.Val.V_DOUBLE, ptMod->LambdaPlus.
  Val.V_DOUBLE,
    ptMod->AlphaPlus.Val.V_RGDOUBLE,ptMod->AlphaMinus.Val
  .V_RGDOUBLE,
    ptMod->CPlus.Val.V_DOUBLE,ptMod->CMinus.Val.V_DOUBLE
    ,r,divid,
    ptOpt->Maturity.Val.V_DATE-ptMod->T.Val.V_DATE,
    Met->Par[0].Val.V_RGDOUBLE/*xstep*/,strike,
    spot, Met->Par[1].Val.V_RGDOUBLE, 1,step,/*multiplie
  r*/
    &(Met->Res[0].Val.V_DOUBLE));
}

static int CHK_OPT(FD_KLZ_EPUT)(void *Opt, void *Mod)
{
  if ((strcmp( ((Option*)Opt)->Name,"PutEuro")==0) )
    return OK;

  return WRONG;
}
```

```
#endif //PremiaCurrentVersion
  static int MET(Init)(PricingMethod *Met,Option *Opt)
  {
    static int first=1;

    if (first)
      {
        Met->Par[0].Val.V_RGDOUBLE=hh;
        Met->Par[1].Val.V_RGDOUBLE=eps;

        first=0;
      }

    return OK;
  }

  PricingMethod MET(FD_KLZ_EPUT)=
  {
    "FD_KLZ_EPUT",
    {   {"SpaceStep",RGDOUBLE,{100},ALLOW    },
        {"Accuracy ", RGDOUBLE, {100},ALLOW    },
        {" ",PREMIA_NULLTYPE,{0},FORBID}},
    CALC(FD_KLZ_EPUT),
    {   {"Price", DOUBLE, {100}, FORBID},
        {" ",PREMIA_NULLTYPE,{0},FORBID}},
    CHK_OPT(FD_KLZ_EPUT),
    CHK_ok ,
    MET(Init)
  } ;

  /*////////////////////////////////////*/

}
```

References