

[Help](#)

```
/*-----*/
/*  CF approx. for caplet prices in one-factor LMM with jumps  */
/*  Algorithm of Glasserman/Merener                               */
/*                                                                */
/*-----*/
/*  Sonke Blunck, Premia 2005                                   */
/*-----*/

#include "
href../../../../mod/lmm_jump1d/lmm_jump1d_std/glassermanmerener_h_src.pdfglasserma

extern "C" {
#include "
href../../../../mod/lmm_jump1d/lmm_jump1d_std/lmm_jump1d_std_h_src.pdf

#if defined(PremiaCurrentVersion) && PremiaCurrentVersion < (2007+2) //The "#els
    static int CHK_OPT(AP_GM)(void *Opt, void *Mod)
    {
        return NONACTIVE;
    }
    int CALC(AP_GM)(void *Opt, void *Mod, PricingMethod *Met)
    {
        return AVAILABLE_IN_FULL_PREMIA;
    }
#else

    static int ap_glassermanmerenenr_caplet(NumFunc_1 *p, double l0, double t0, do
    {

        capletMat = capletMat - t0;
        return lmm_jump_caplet_GlassMer_pricer(tenor, capletMat, strike, l0, sigma,

    }

    int CALC(AP_GM)(void *Opt, void *Mod, PricingMethod *Met)
    {
        TYPEOPT *ptOpt = (TYPEOPT *)Opt;
        TYPEMOD *ptMod = (TYPEMOD *)Mod;
```

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        return ap_glassermanmerenenr_caplet(ptOpt->PayOff.Val.V_NUMFUNC_1, ptMod->10
                                           ptMod->T.Val.V_DATE,
                                           ptMod->Sigma.Val.V_PDOUBLE,
                                           ptOpt->BMaturity.Val.V_DATE,
                                           ptOpt->FixedRate.Val.V_PDOUBLE,
                                           ptOpt->ResetPeriod.Val.V_DATE,
                                           &(Met->Res[0].Val.V_DOUBLE));
    }

    static int CHK_OPT(AP_GM)(void *Opt, void *Mod)
    {

        if ((strcmp(((Option *)Opt)->Name, "Caplet") == 0))
            return OK;
        else
            return WRONG;
    }

#endif //PremiaCurrentVersion
    static int MET(Init)(PricingMethod *Met, Option *Opt)
    {
        if (Met->init == 0)
        {
            Met->init = 1;
        }

        return OK;
    }

    PricingMethod MET(AP_GM) =
    {
        "AP_GlassermanMerener",
        {" ", PREMIA_NULLTYPE, {0}, FORBID}},
        CALC(AP_GM),
        {"Price", DOUBLE, {100}, FORBID}/*,{"Delta",DOUBLE,{100},FORBID}*/ , {" ",
        CHK_OPT(AP_GM),
        CHK_ok,
        MET(Init)
    } ;
}

```