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if( fetch( "omhat", "i", omhat) == 0 ) omhat = 0 #  $\hat{\omega}$ 
if( fetch( "kxhat", "i", kxhat) == 0 ) kxhat = 0 #  $\hat{k}_x$ 
if( fetch( "kzhat", "i", kzhat) == 0 ) kzhat = 0 #  $\hat{k}_z$ 
if( fetch( "degree", "i", degree) == 0 ) degree = 90
if( fetch( "tfilt", "i", tfilt) == 0 ) tfilt = 1
if( fetch( "xfilt", "i", xfilt) == 0 ) xfilt = 1

if( fetch( "rho", "f", rho) == 0 ) rho = 1-4./nw
if( fetch( "bi", "f", bi) == 0 ) bi = 6.726 #  $b^{-1}$ 
if( fetch( "r0", "f", r0) == 0 ) r0 = 0.7071
if( fetch( "eps", "f", eps) == 0 ) eps = 0.

call putch("d1","f", dt); call putch("label1","s","sec")
call putch("d2","f", dx); call putch("label2","s","kilometers")
call hclose() # close data description file
pi = 3.14159265
do ik = 1, nk { # loop over all  $k_x$ 
    k = 2*pi * (ik-1.) / nk
    if( k > pi ) k = k - 2*pi
    k = k / dx
    if( kxhat == 0 )
        vk2 = (v/2)**2 * k*k
    else
        vk2 = (v/2)**2 * (2/dx)**2 * sin(k*dx/2)**2 / (1 - (4./bi) * sin(k*dx/2)**2 )

    do iw = 1, nw { # loop over all  $\omega$ 
        omega = 2*pi * (iw-1.) / nw
        if( omega > pi ) omega = omega - 2*pi
        omega = omega / dt
        cz = cexp( cmplx( 0., omega * dt ) )
        if( omhat == 0 )
            cs = cmplx( 1.e-5 / dt, - omega)
        else

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