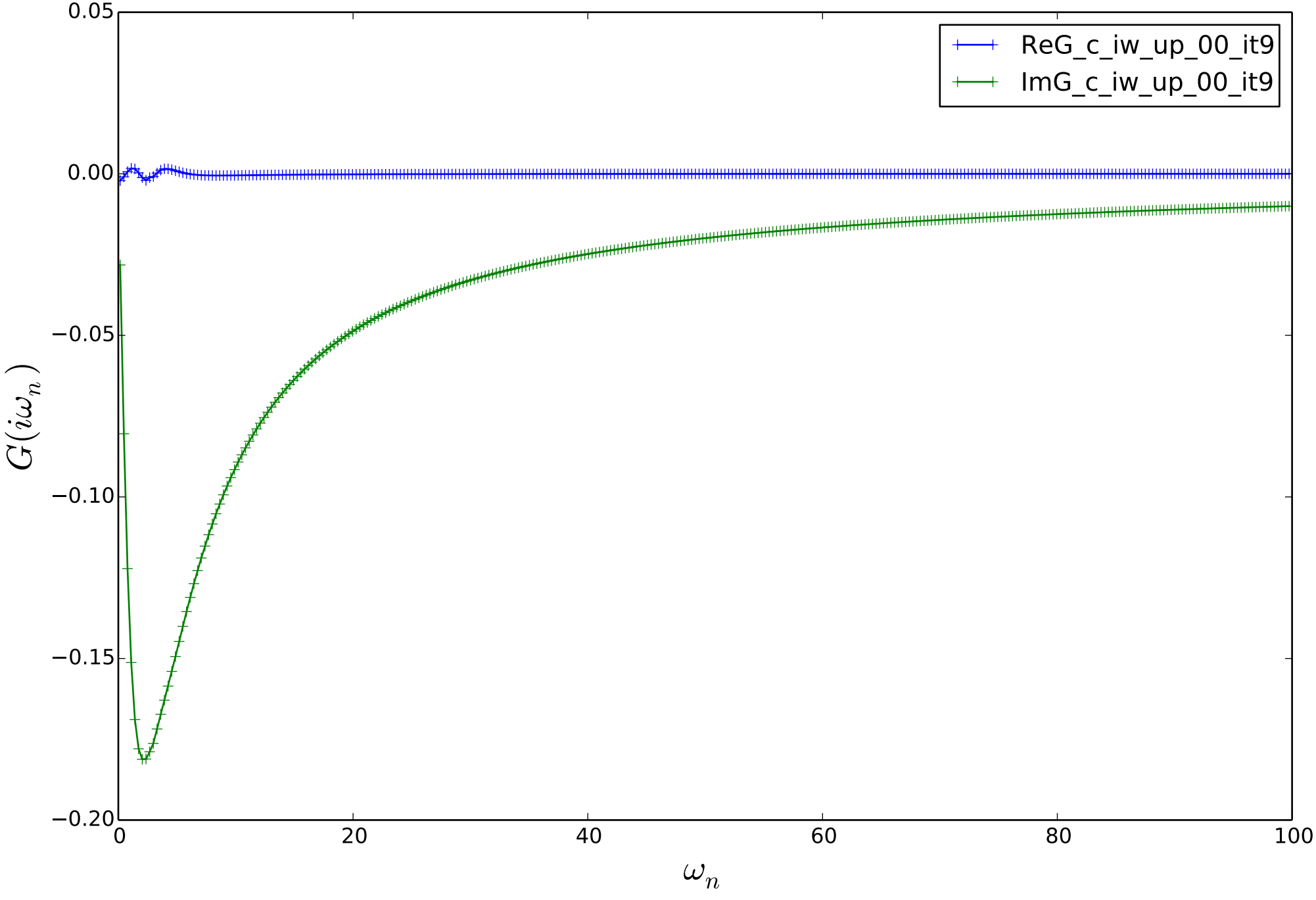
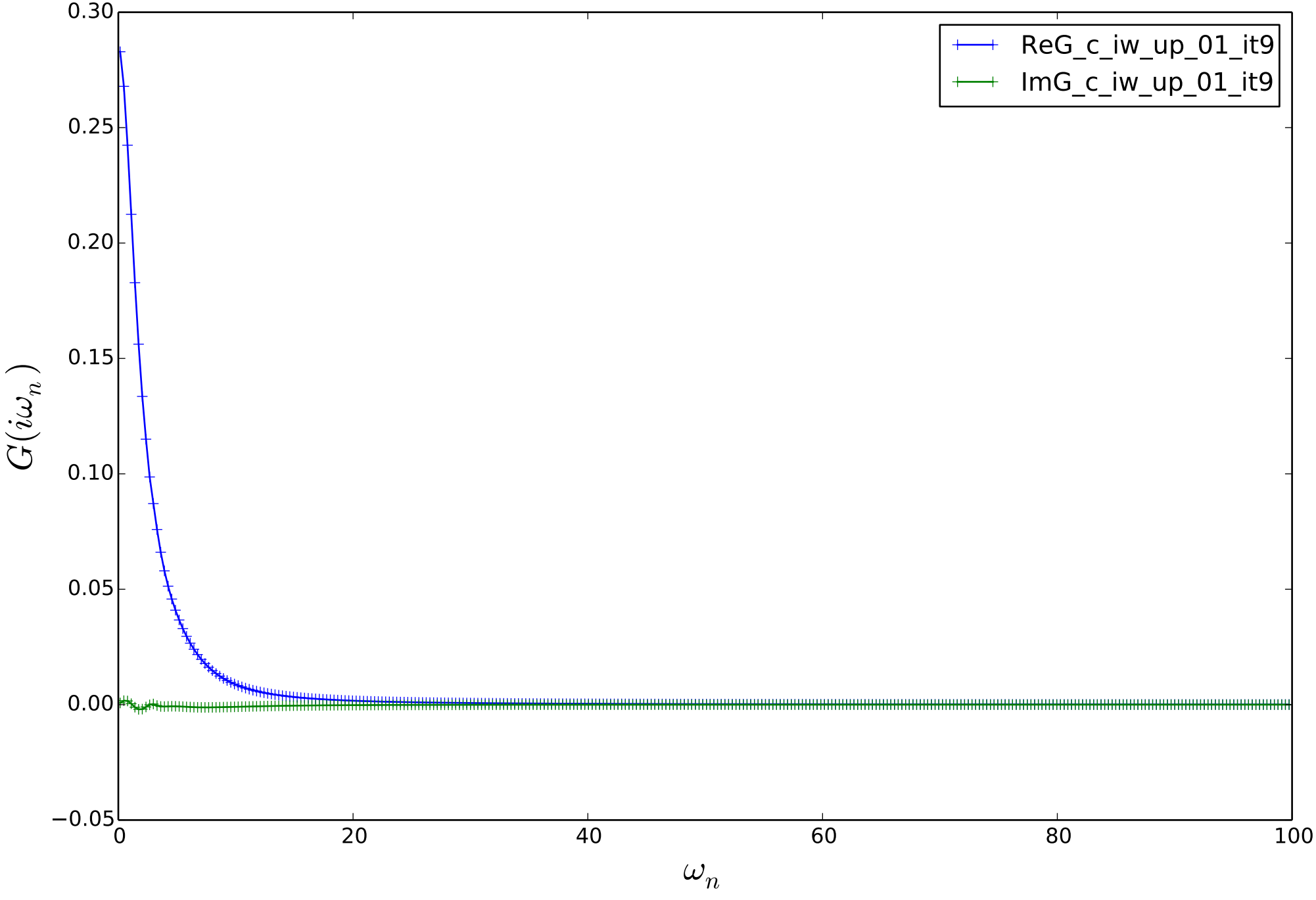
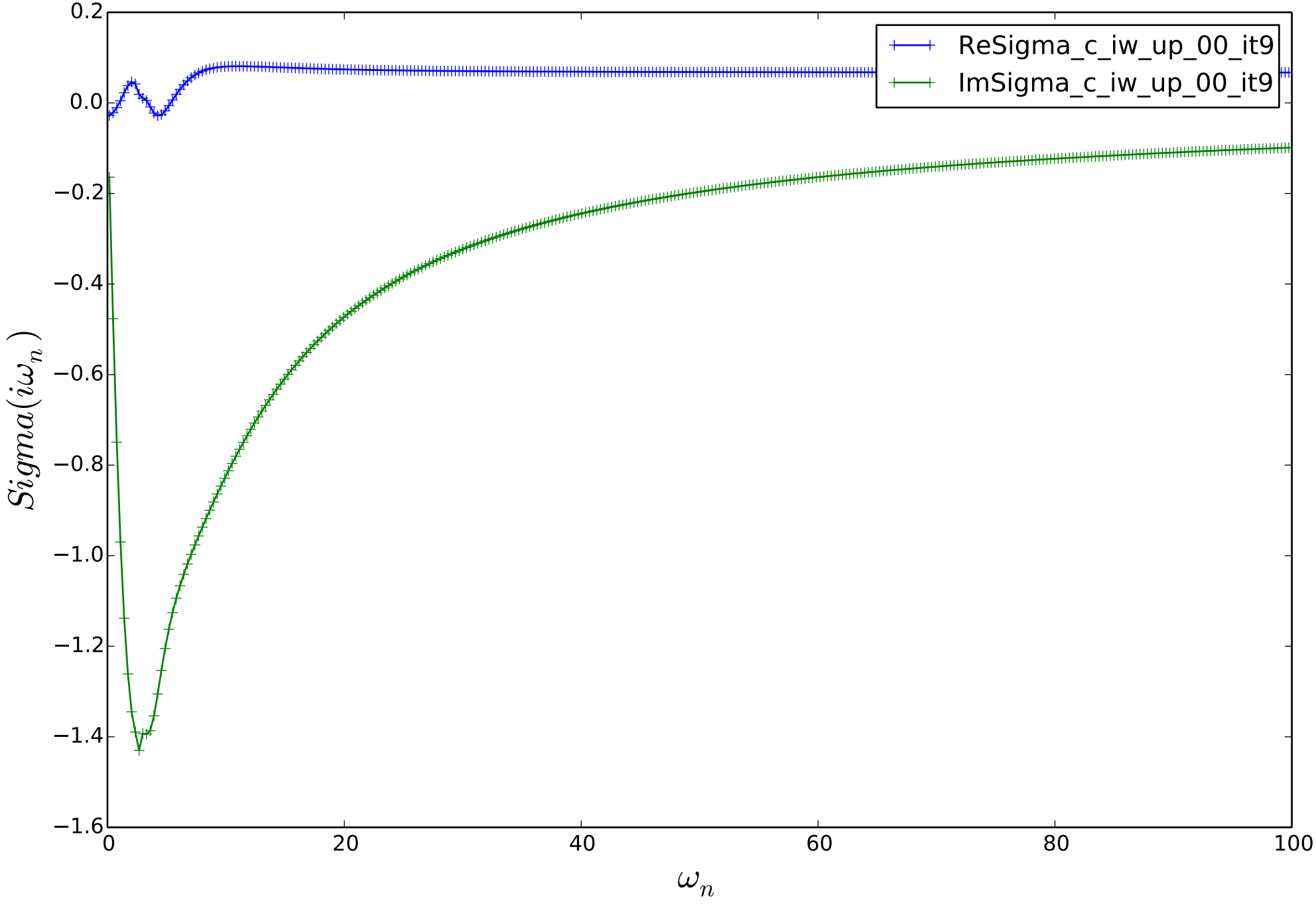
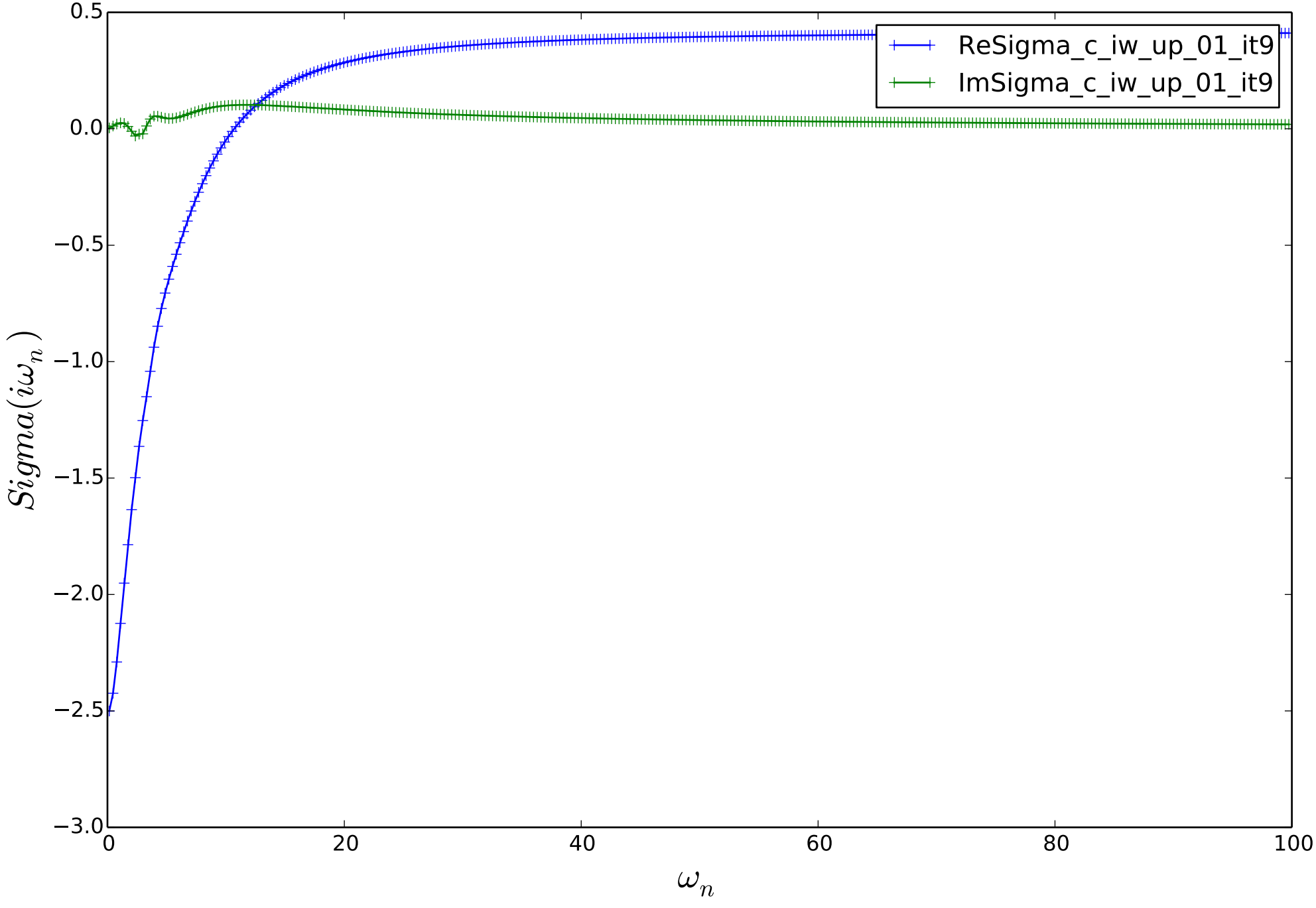
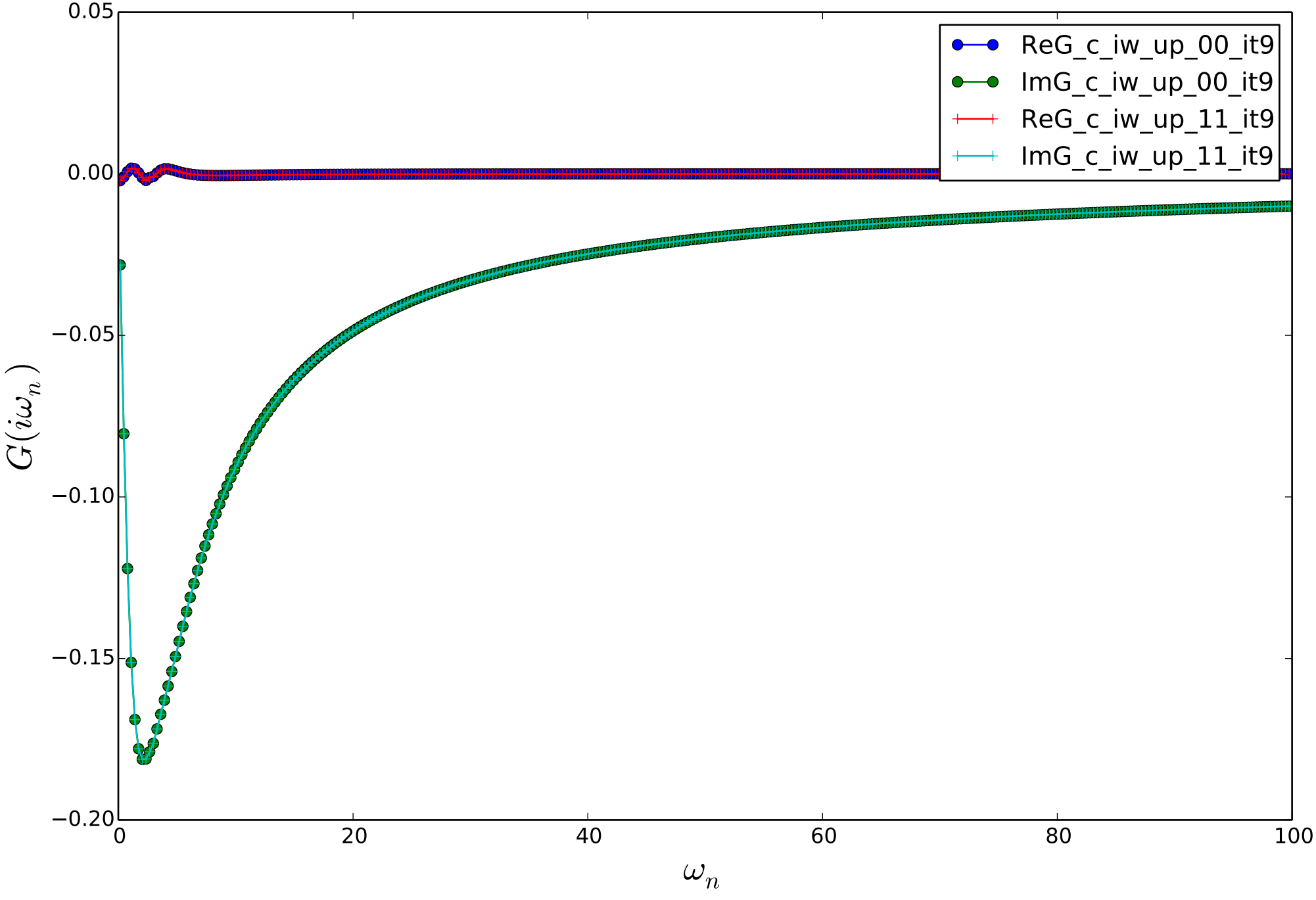
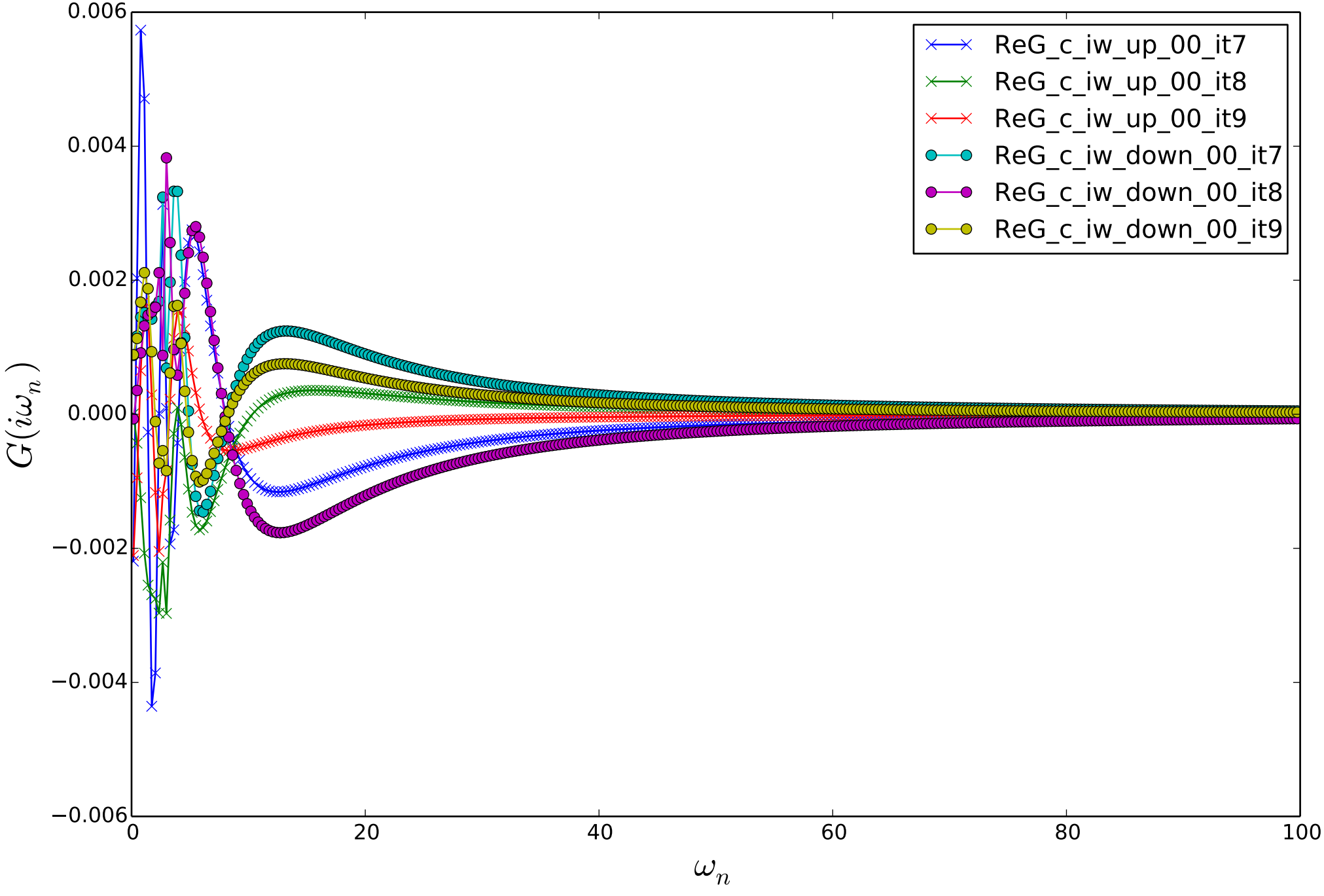

ReG_c_iw_up_00_it9
ImG_c_iw_up_00_it9
0.05
0.00
−0.05
−0.10
−0.15
−0.20
0
20
40
60
80
100
$G(i\omega_n)$
ω_n

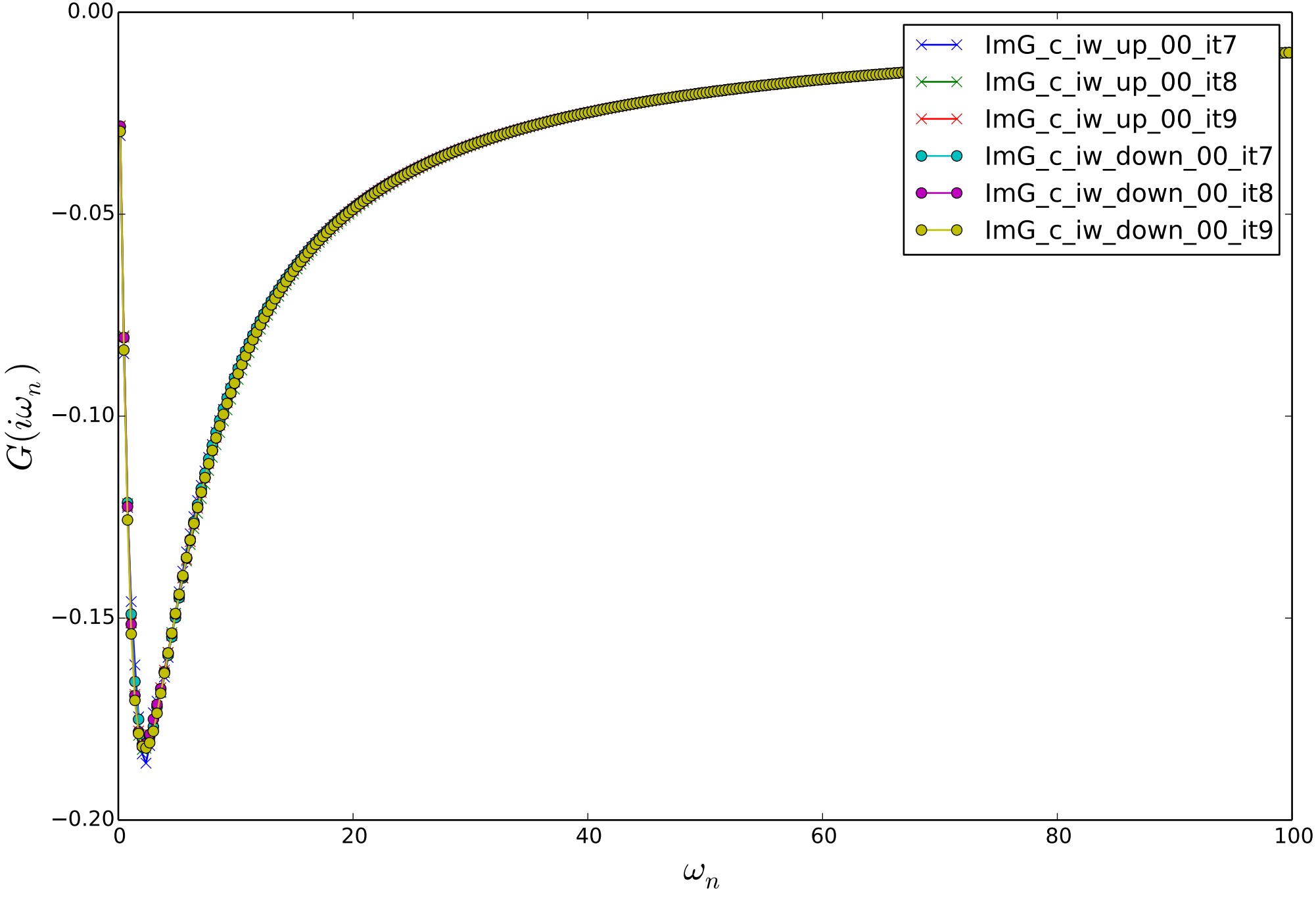

ReG_c_iw_up_01_it9
ImG_c_iw_up_01_it9
0.30
0.25
0.20
0.15
0.10
0.05
0.00
−0.05
0
20
40
60
80
100
$G(i\omega_n)$
ω_n

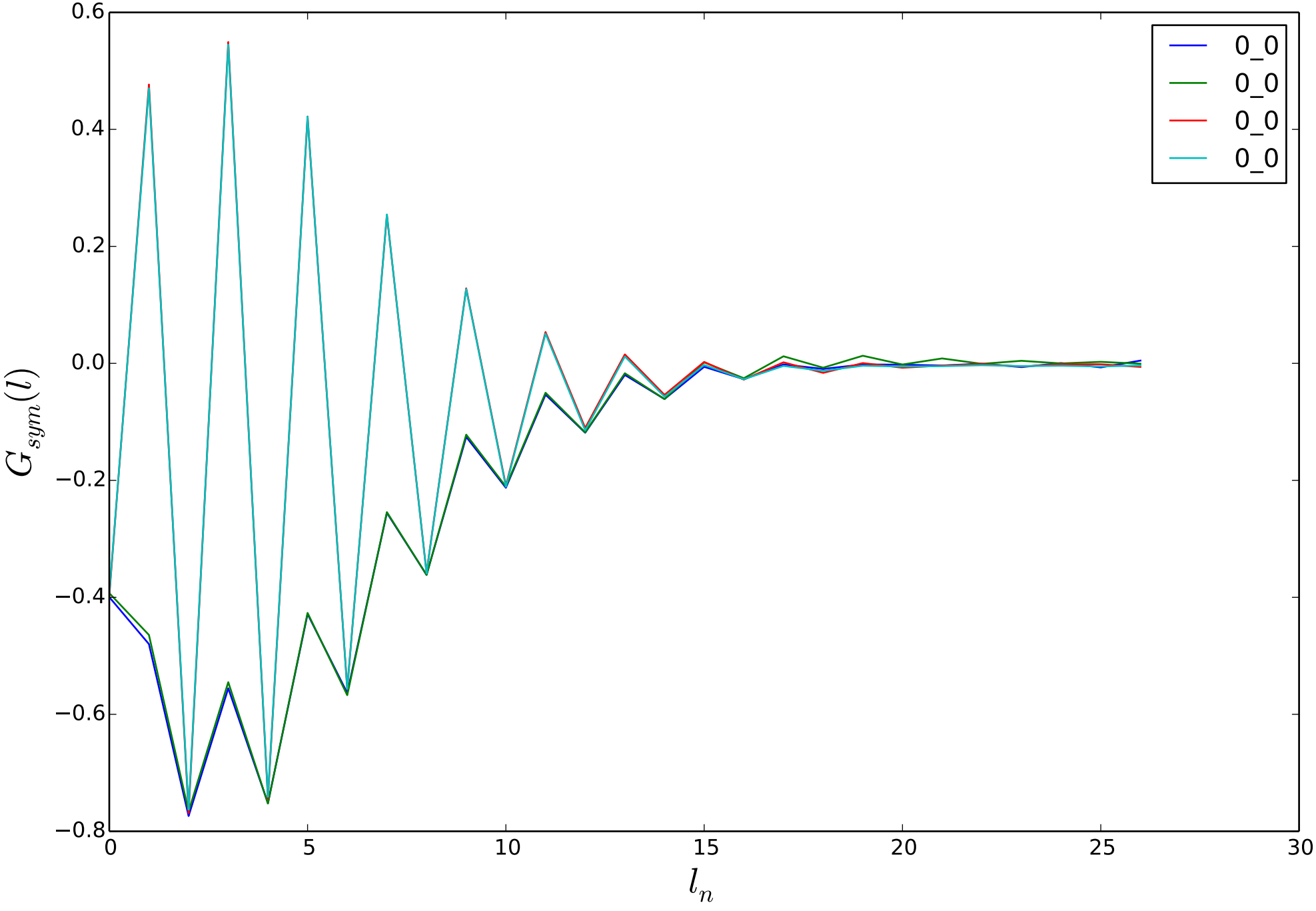

ReSigma_c_iw_up_00_it9
ImSigma_c_iw_up_00_it9
$Sigma(i\omega_n)$
ω_n
0.2
0.0
−0.2
−0.4
−0.6
−0.8
−1.0
−1.2
−1.4
−1.6
0
20
40
60
80
100

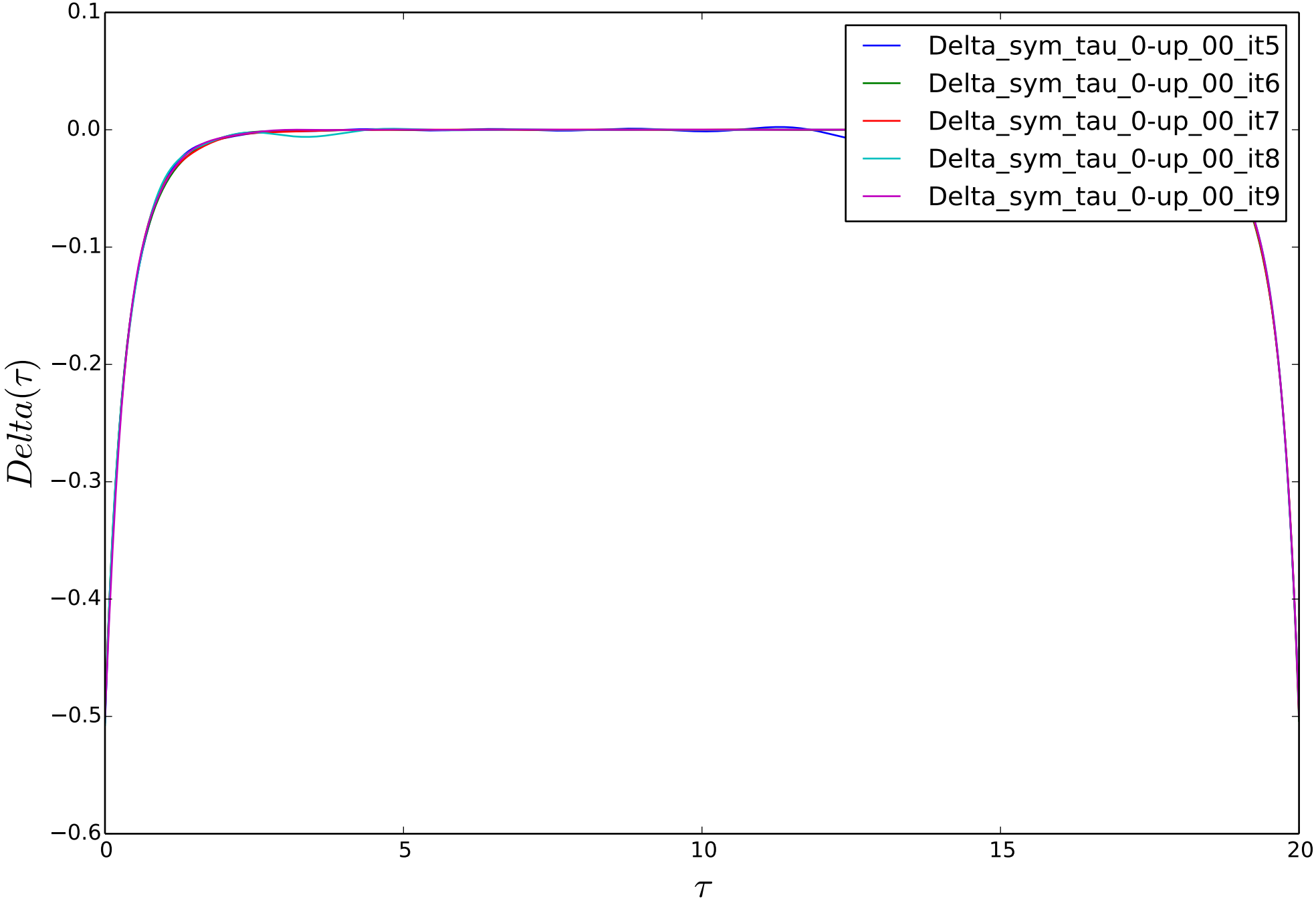

ReSigma_c_iw_up_01_it9
ImSigma_c_iw_up_01_it9
0.5
0.0
−0.5
−1.0
−1.5
−2.0
−2.5
−3.0
0
20
40
60
80
100
$Sigma(i\omega_n)$
ω_n

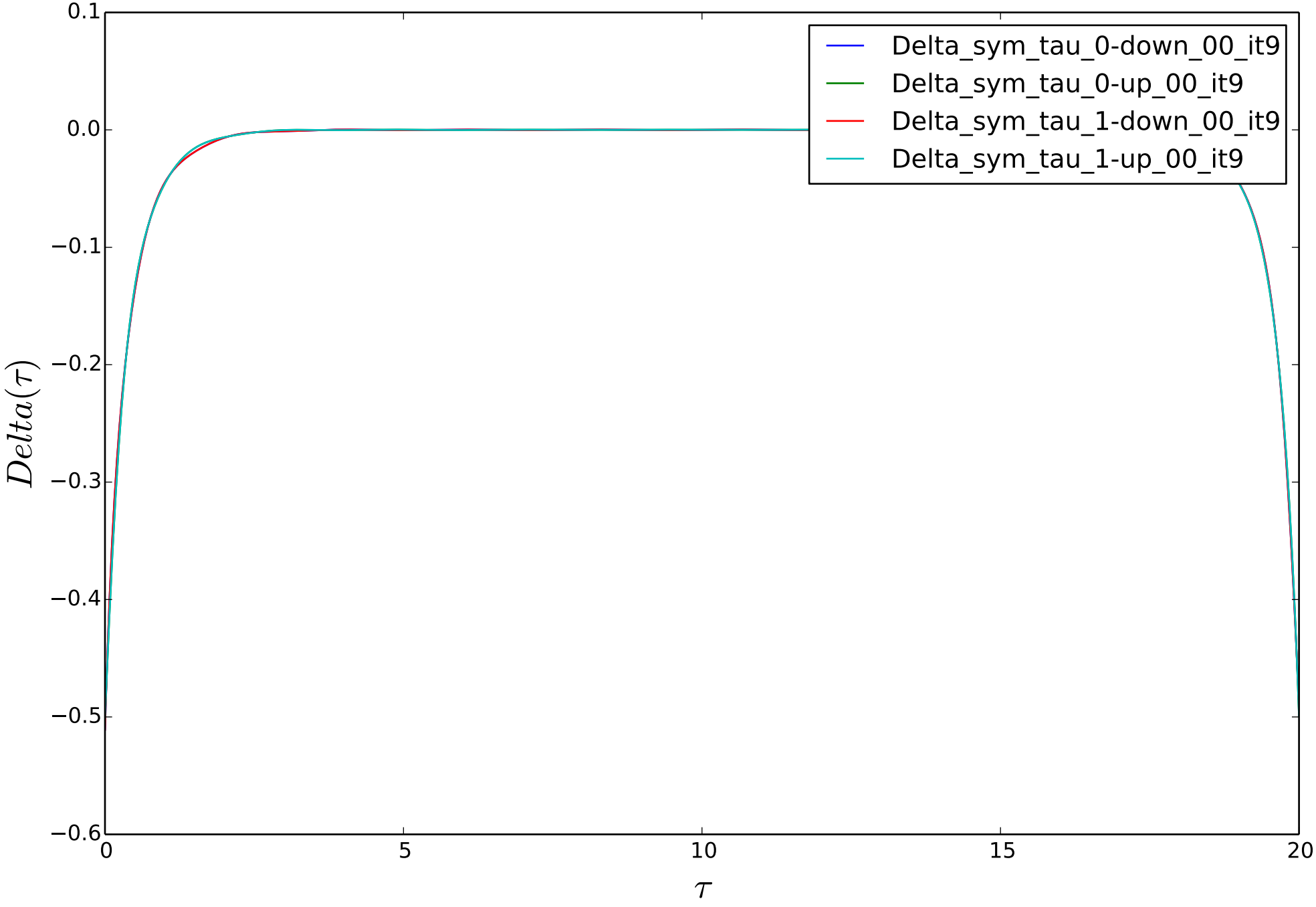

ReG_c_iw_up_00_it9
ImG_c_iw_up_00_it9
ReG_c_iw_up_11_it9
ImG_c_iw_up_11_it9
0.05
0.00
−0.05
−0.10
−0.15
−0.20
0
20
40
60
80
100
$G(i\omega_n)$
ω_n

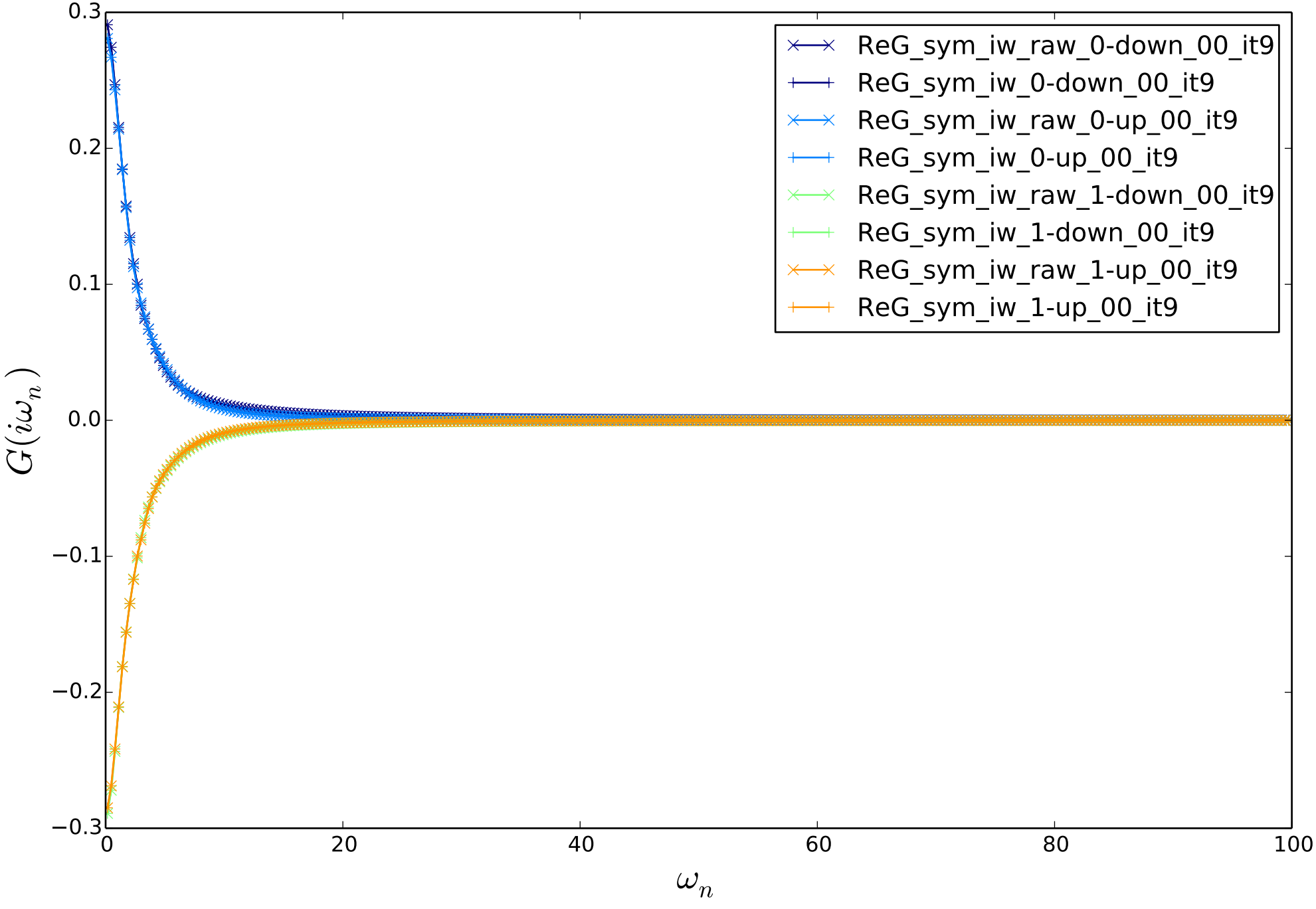

ReG_c_iw_up_00_it7
ReG_c_iw_up_00_it8
ReG_c_iw_up_00_it9
ReG_c_iw_down_00_it7
ReG_c_iw_down_00_it8
ReG_c_iw_down_00_it9
0.006
0.004
0.002
0.000
−0.002
−0.004
−0.006
0
20
40
60
80
100
$G(i\omega_n)$
ω_n

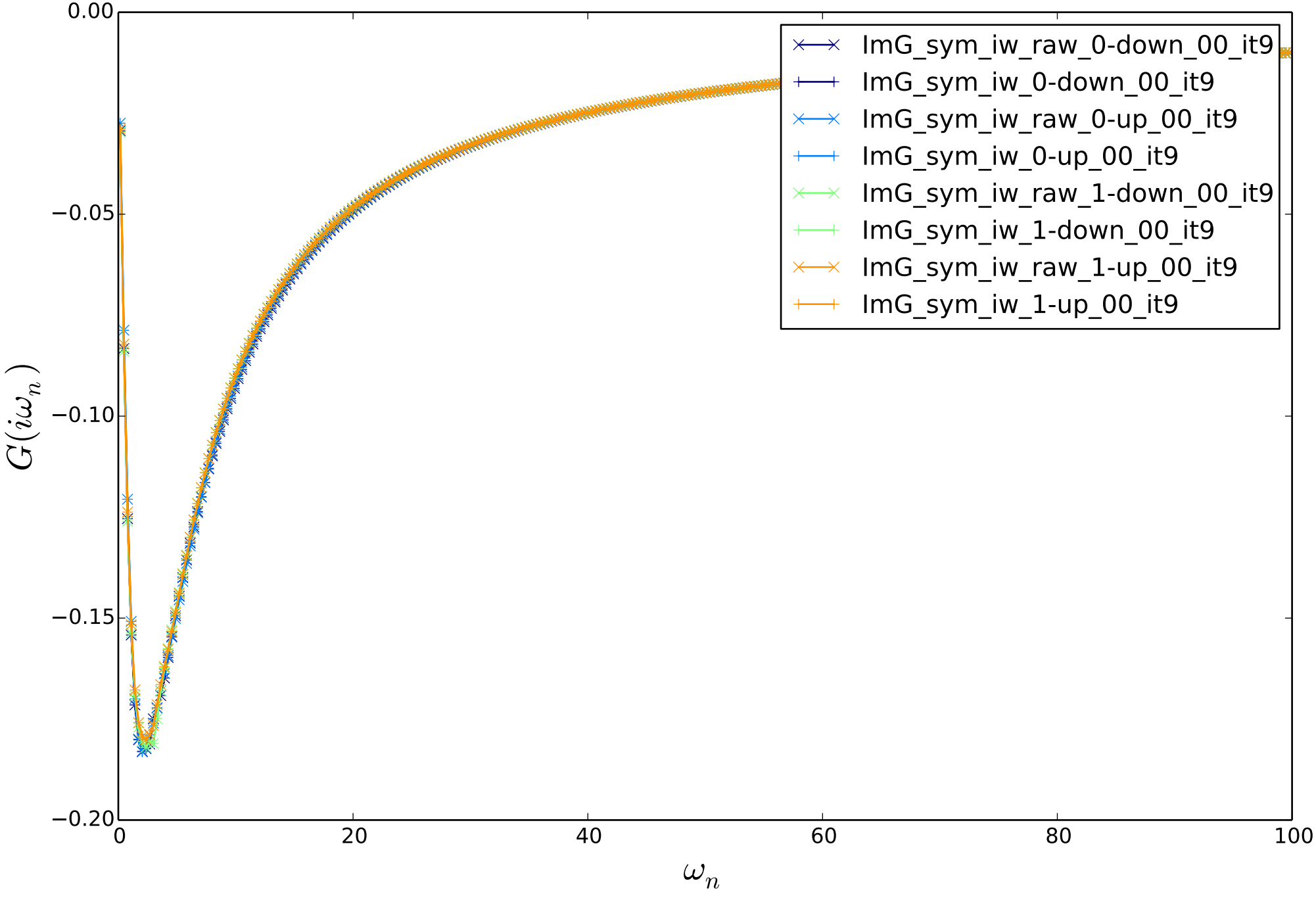

0.00
−0.05
−0.10
−0.15
−0.20
0
20
40
60
80
100
$G(i\omega_n)$
ω_n
ImG_c_iw_up_00_it7
ImG_c_iw_up_00_it8
ImG_c_iw_up_00_it9
ImG_c_iw_down_00_it7
ImG_c_iw_down_00_it8
ImG_c_iw_down_00_it9

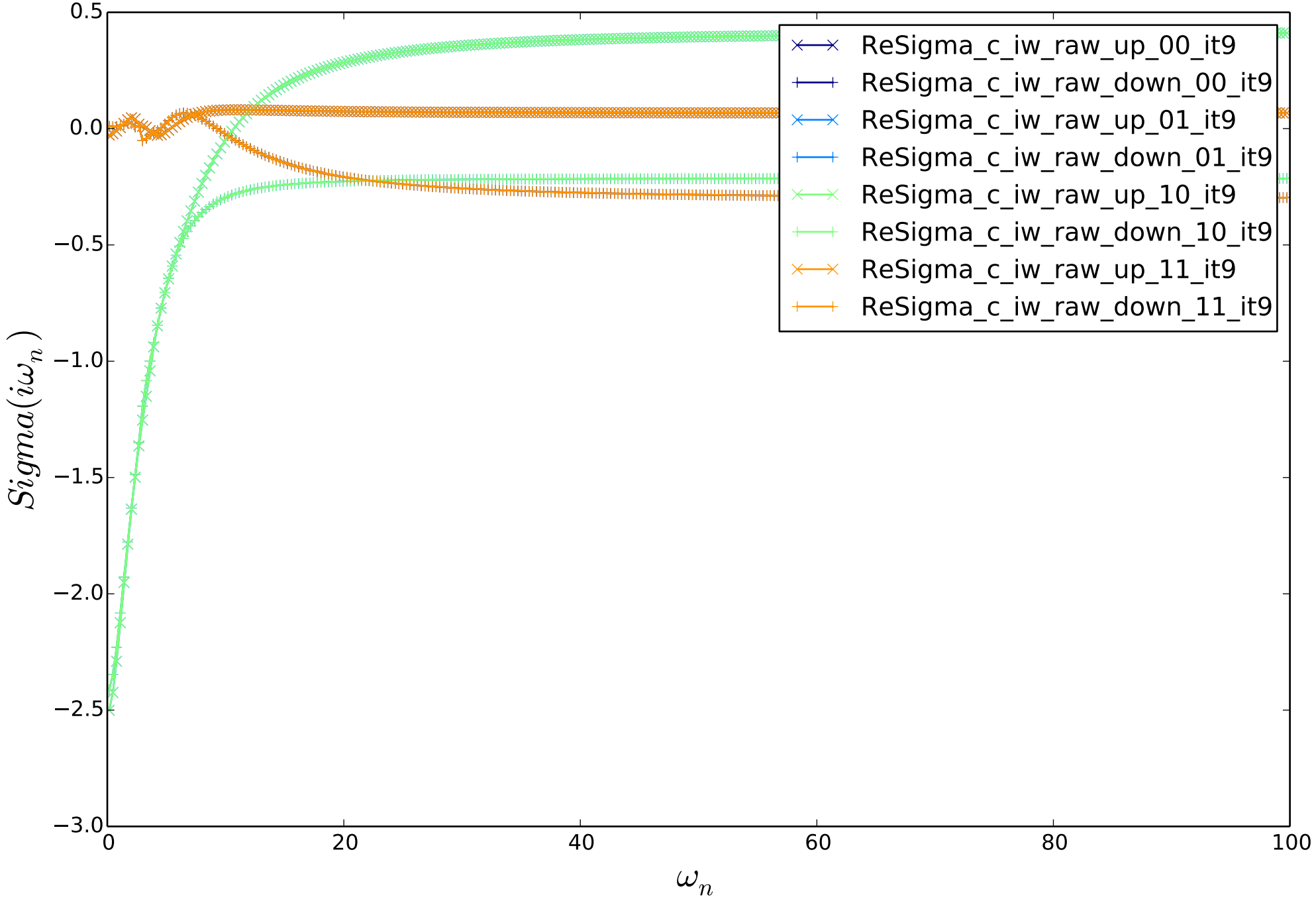

0_0
0_0
0_0
0_0
$G_{sym}(l)$
l_n
0.6
0.4
0.2
0.0
−0.2
−0.4
−0.6
−0.8
0
5
10
15
20
25
30

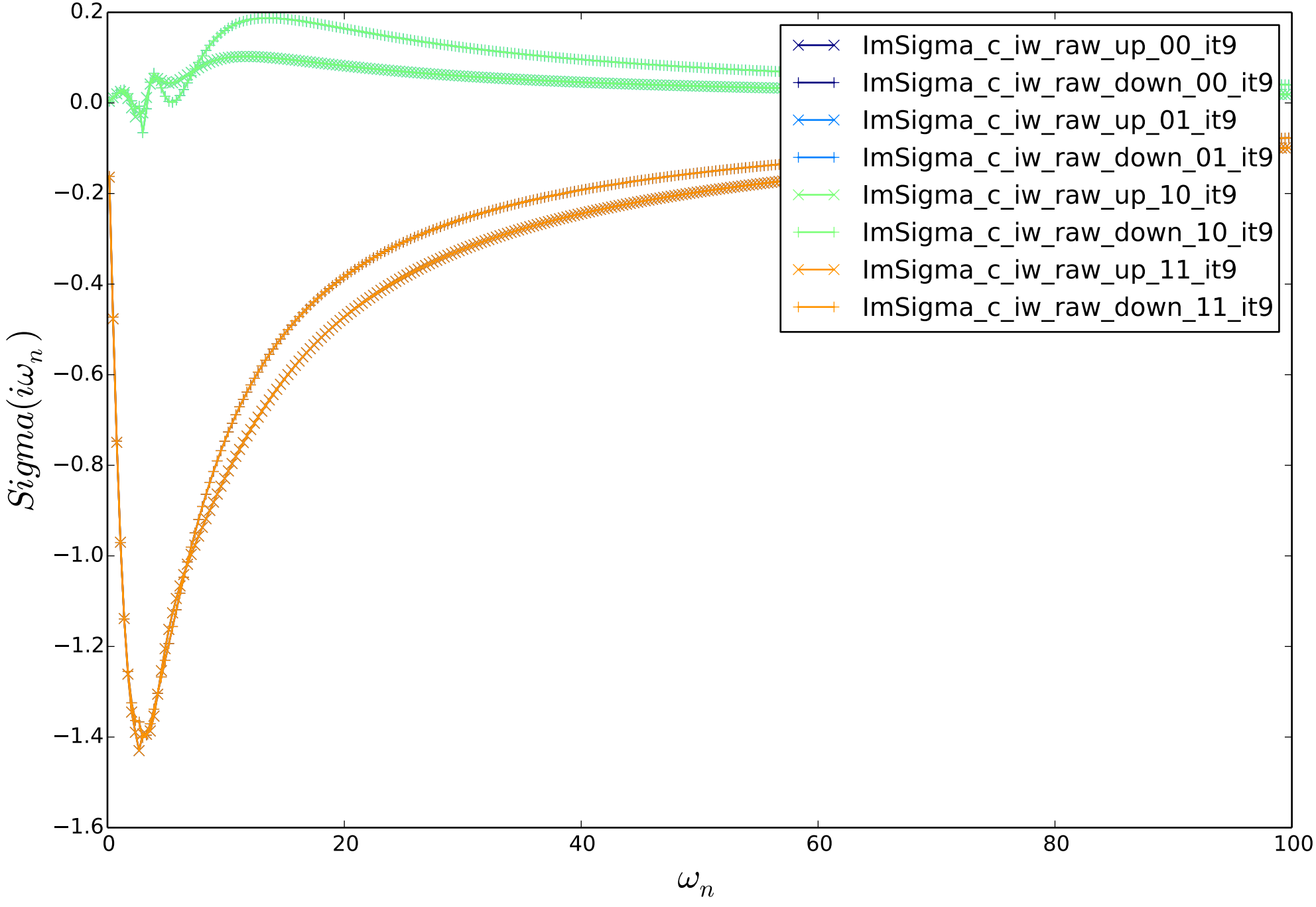

Delta_sym_tau_0-up_00_it5
Delta_sym_tau_0-up_00_it6
Delta_sym_tau_0-up_00_it7
Delta_sym_tau_0-up_00_it8
Delta_sym_tau_0-up_00_it9
0.1
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
5
10
15
20
$Delta(\tau)$
τ

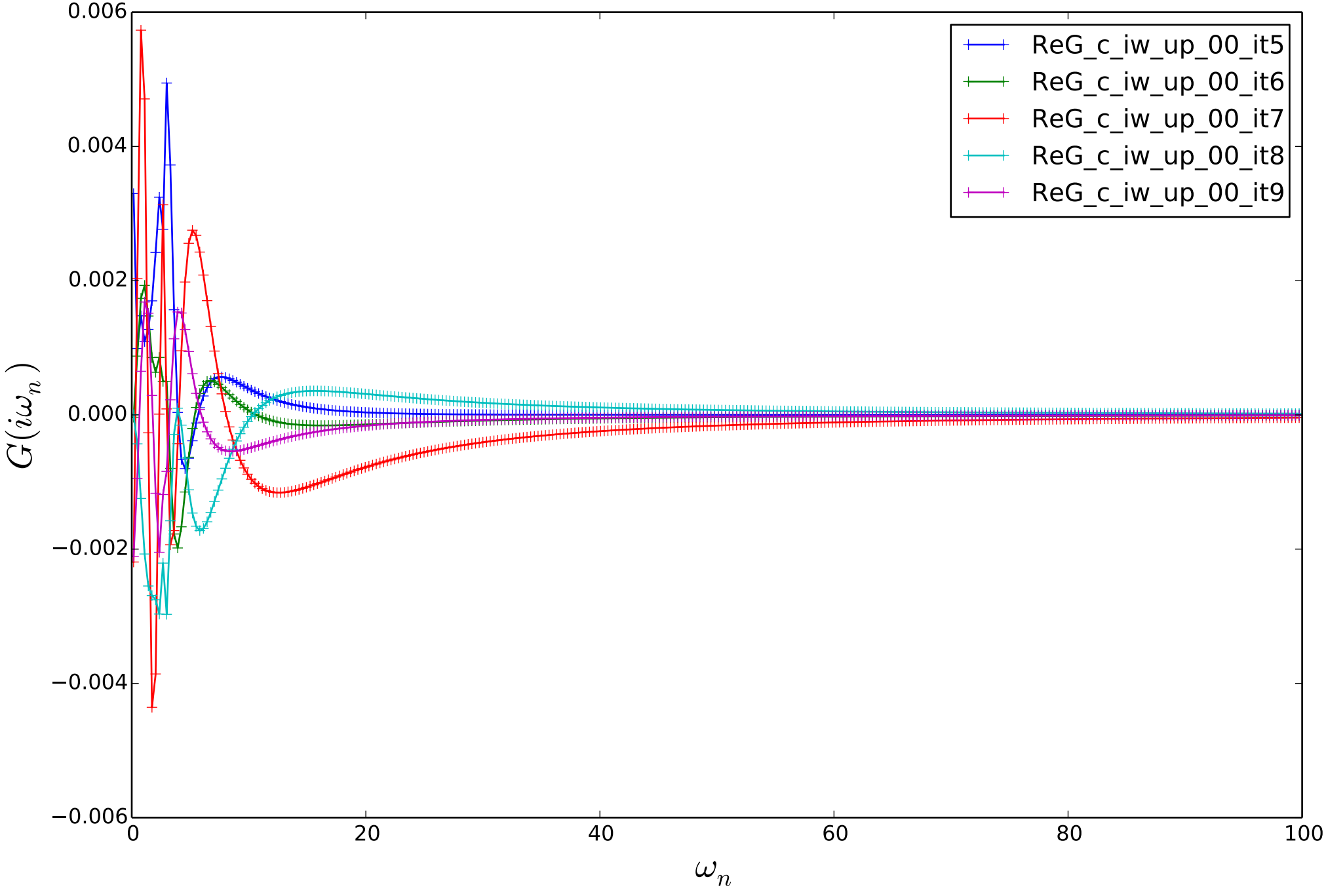

Delta_sym_tau_0-down_00_it9
Delta_sym_tau_0-up_00_it9
Delta_sym_tau_1-down_00_it9
Delta_sym_tau_1-up_00_it9
0.1
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
5
10
15
20
$Delta(\tau)$
τ

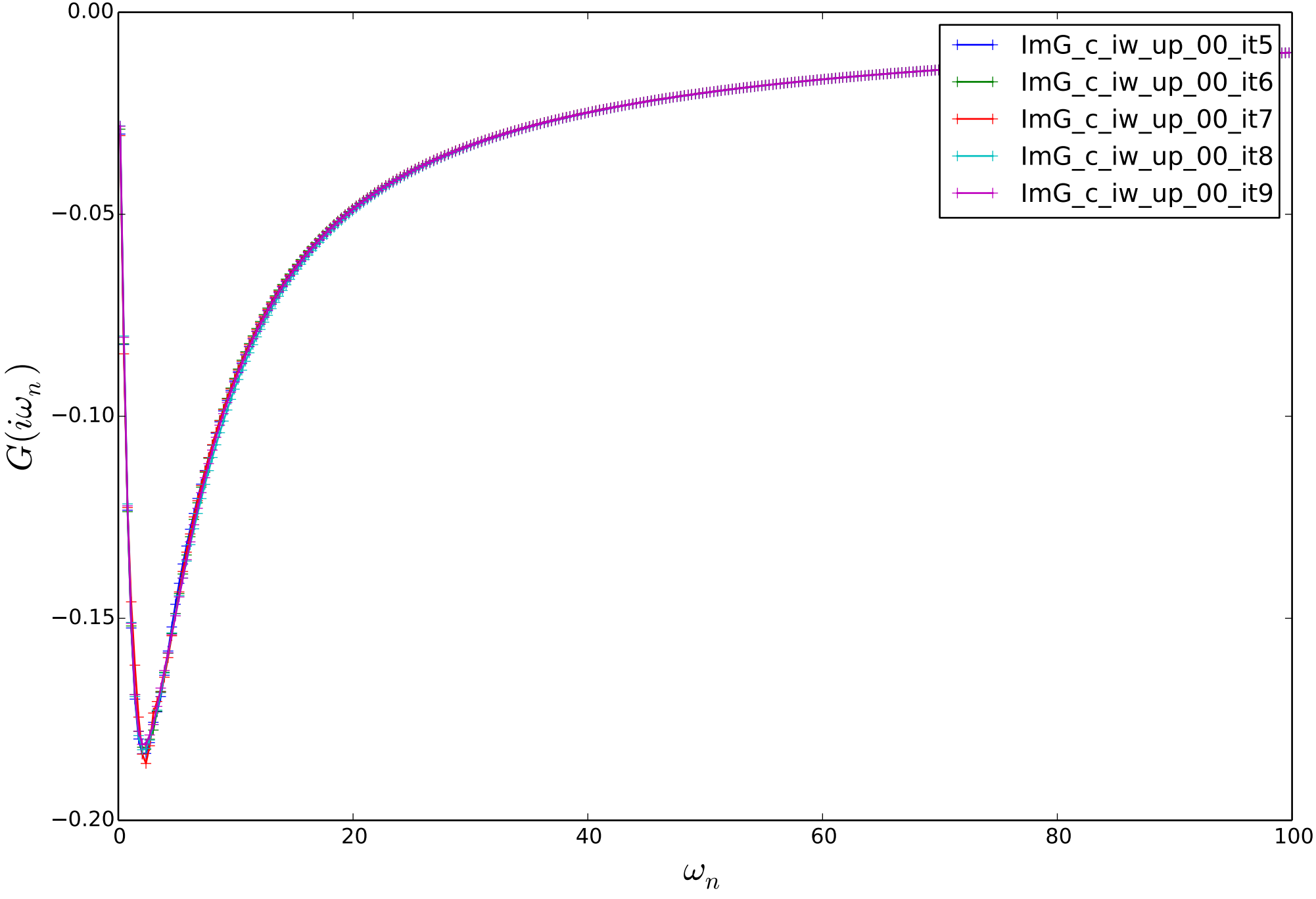

ReG_sym_iw_raw_0-down_00_it9
ReG_sym_iw_0-down_00_it9
ReG_sym_iw_raw_0-up_00_it9
ReG_sym_iw_0-up_00_it9
ReG_sym_iw_raw_1-down_00_it9
ReG_sym_iw_1-down_00_it9
ReG_sym_iw_raw_1-up_00_it9
ReG_sym_iw_1-up_00_it9
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
20
40
60
80
100
$G(i\omega_n)$
ω_n

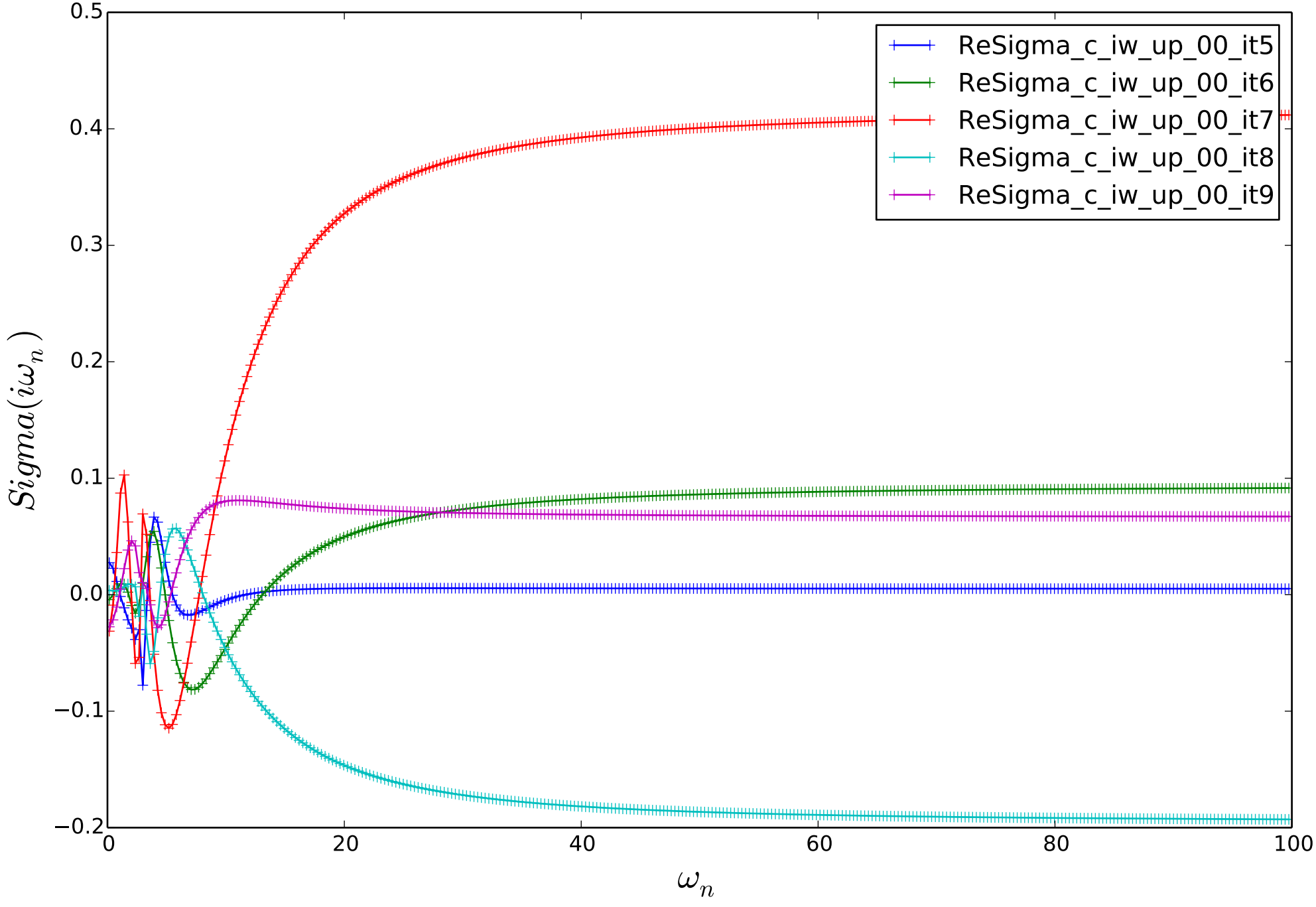

ImG_sym_iw_raw_0-down_00_it9
ImG_sym_iw_0-down_00_it9
ImG_sym_iw_raw_0-up_00_it9
ImG_sym_iw_0-up_00_it9
ImG_sym_iw_raw_1-down_00_it9
ImG_sym_iw_1-down_00_it9
ImG_sym_iw_raw_1-up_00_it9
ImG_sym_iw_1-up_00_it9
0.00
−0.05
−0.10
−0.15
−0.20
0
20
40
60
80
100
$G(i\omega_n)$
ω_n

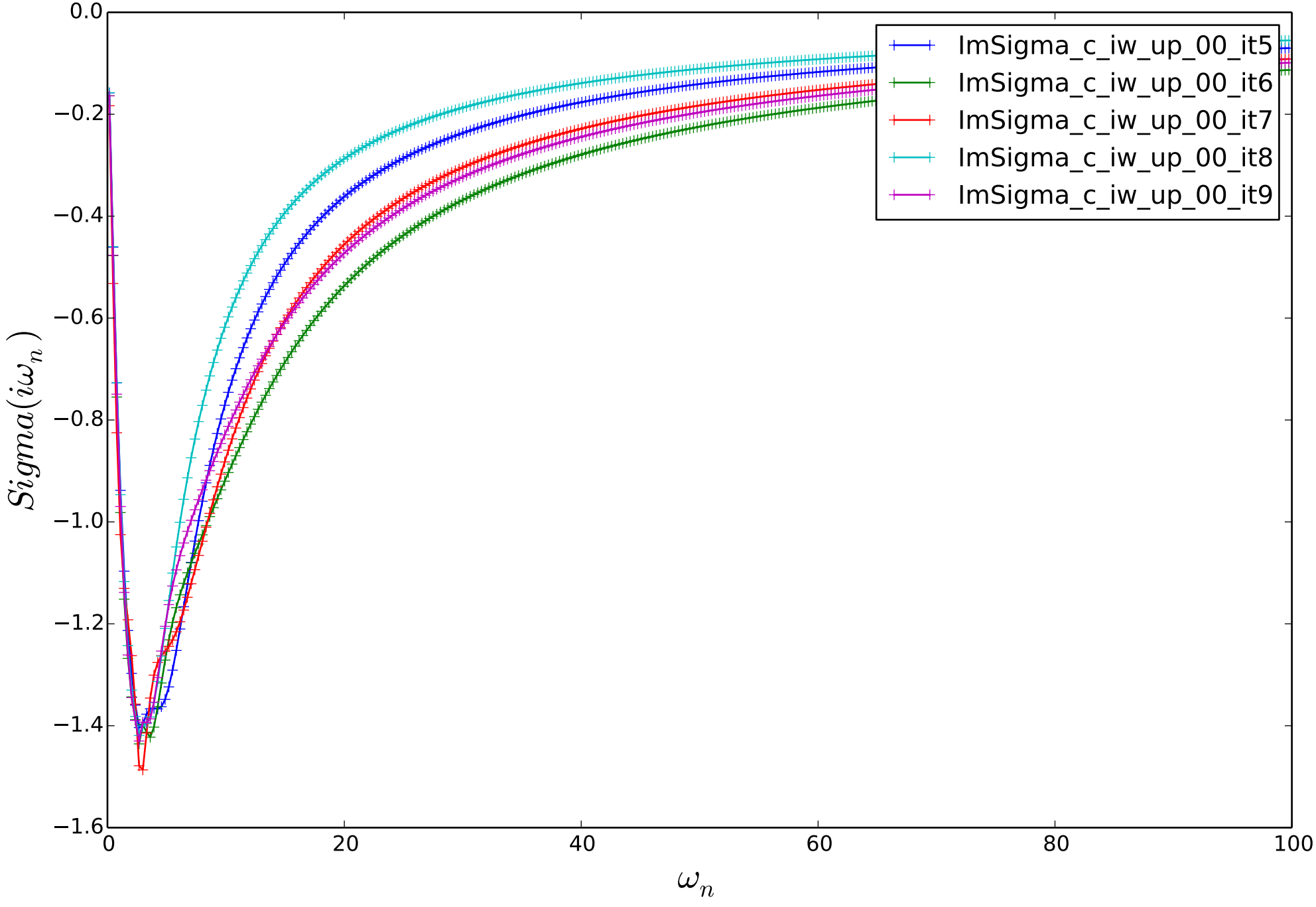

ReSigma_c_iw_raw_up_00_it9
ReSigma_c_iw_raw_down_00_it9
ReSigma_c_iw_raw_up_01_it9
ReSigma_c_iw_raw_down_01_it9
ReSigma_c_iw_raw_up_10_it9
ReSigma_c_iw_raw_down_10_it9
ReSigma_c_iw_raw_up_11_it9
ReSigma_c_iw_raw_down_11_it9
0.5
0.0
−0.5
−1.0
−1.5
−2.0
−2.5
−3.0
0
20
40
60
80
100
$Sigma(i\omega_n)$
ω_n

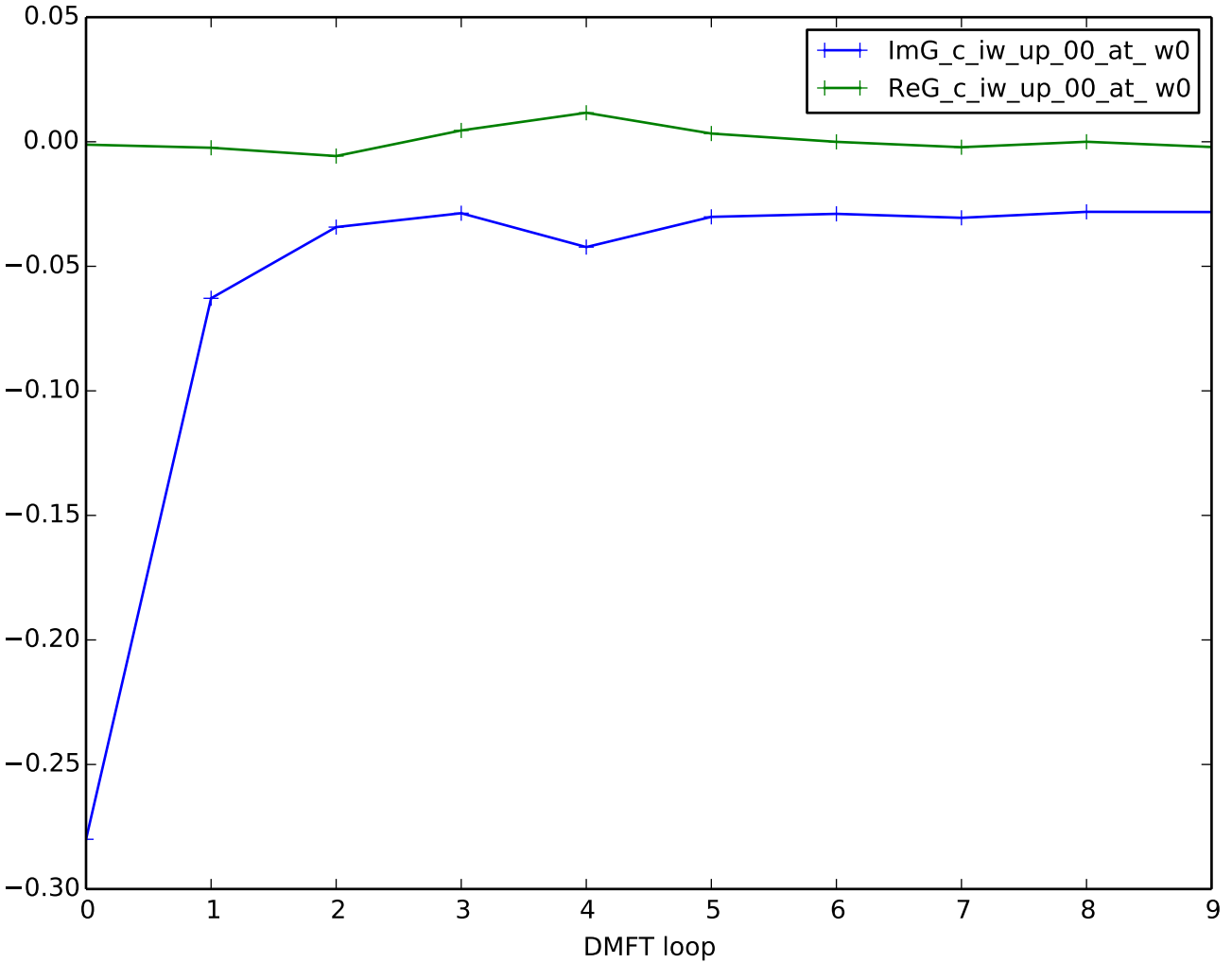

ImSigma_c_iw_raw_up_00_it9
ImSigma_c_iw_raw_down_00_it9
ImSigma_c_iw_raw_up_01_it9
ImSigma_c_iw_raw_down_01_it9
ImSigma_c_iw_raw_up_10_it9
ImSigma_c_iw_raw_down_10_it9
ImSigma_c_iw_raw_up_11_it9
ImSigma_c_iw_raw_down_11_it9
0.2
0.0
−0.2
−0.4
−0.6
−0.8
−1.0
−1.2
−1.4
−1.6
0
20
40
60
80
100
$Sigma(i\omega_n)$
ω_n

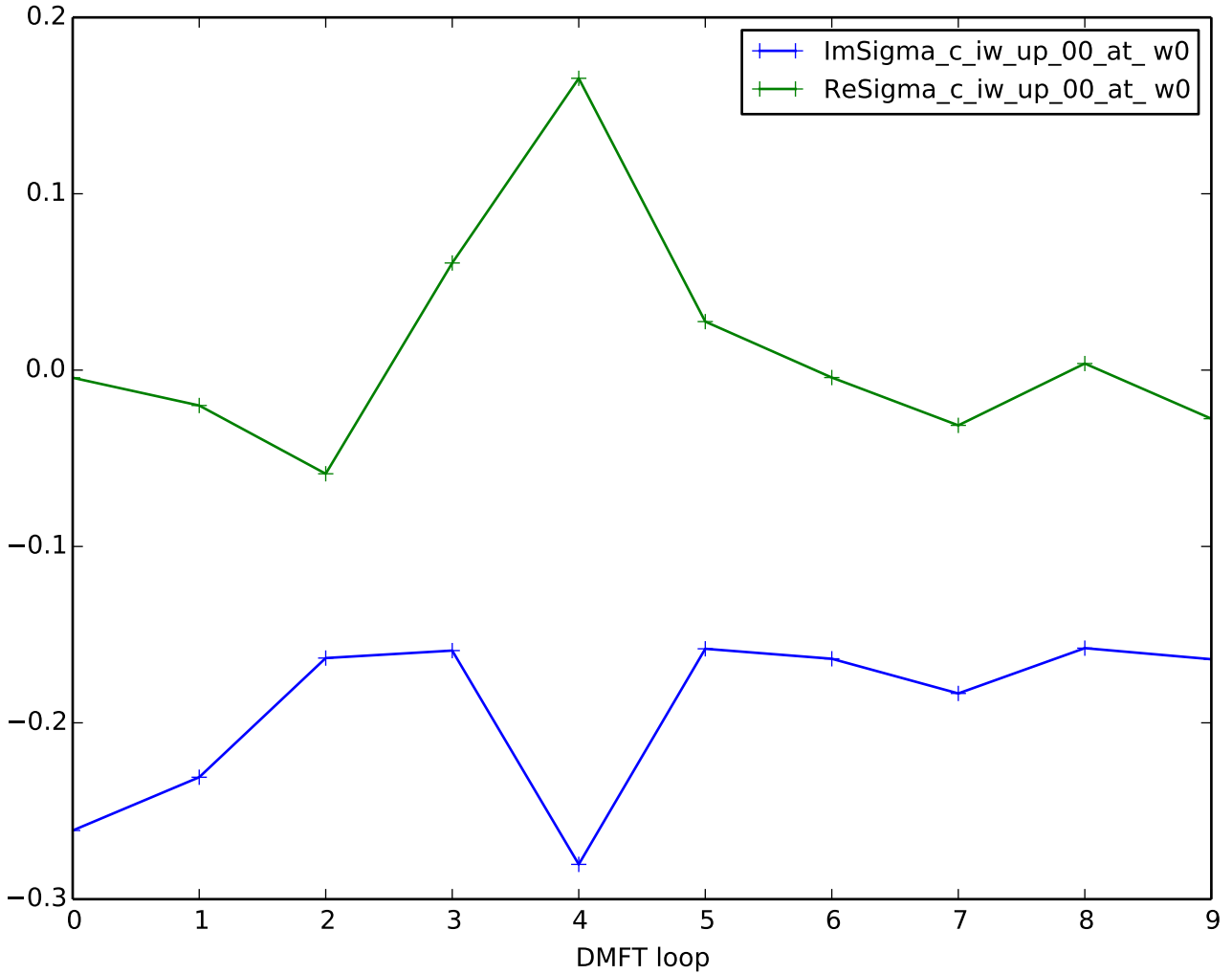

ReG_c_iw_up_00_it5
ReG_c_iw_up_00_it6
ReG_c_iw_up_00_it7
ReG_c_iw_up_00_it8
ReG_c_iw_up_00_it9
0.006
0.004
0.002
0.000
−0.002
−0.004
−0.006
0
20
40
60
80
100
$G(i\omega_n)$
ω_n

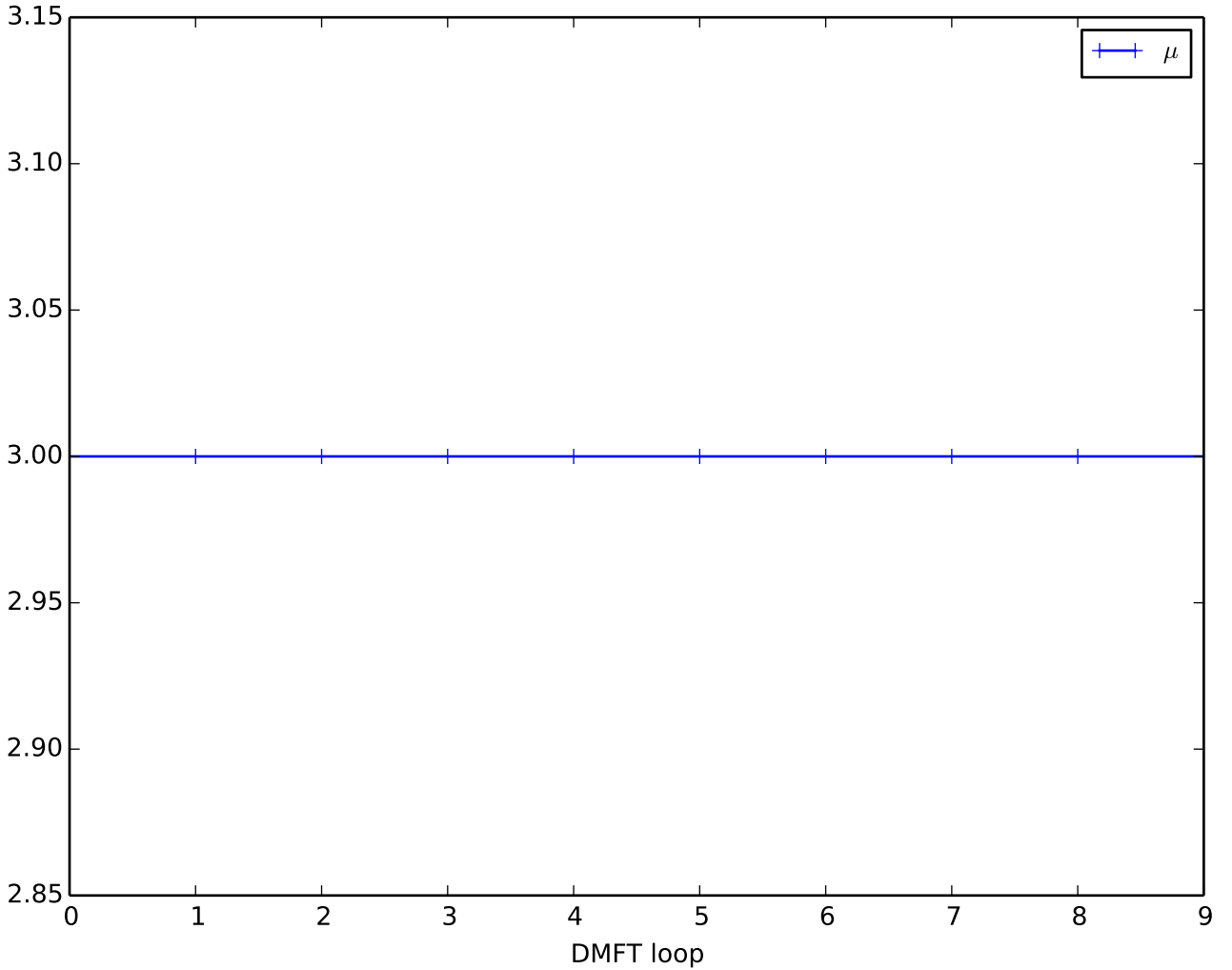

ImG_c_iw_up_00_it5
ImG_c_iw_up_00_it6
ImG_c_iw_up_00_it7
ImG_c_iw_up_00_it8
ImG_c_iw_up_00_it9
0.00
−0.05
−0.10
−0.15
−0.20
0
20
40
60
80
100
$G(i\omega_n)$
ω_n

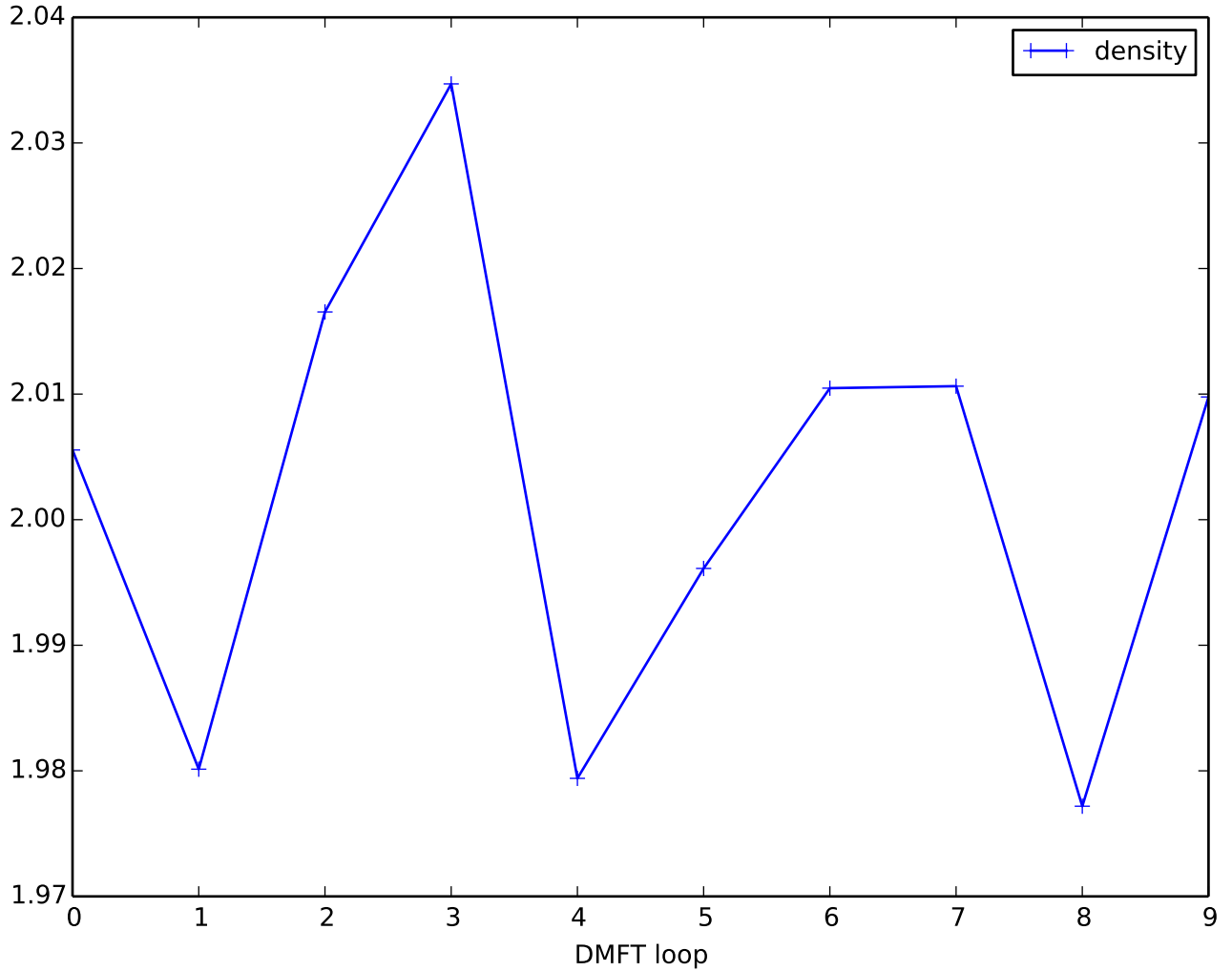

ReSigma_c_iw_up_00_it5
ReSigma_c_iw_up_00_it6
ReSigma_c_iw_up_00_it7
ReSigma_c_iw_up_00_it8
ReSigma_c_iw_up_00_it9
0.5
0.4
0.3
0.2
0.1
0.0
−0.1
−0.2
0
20
40
60
80
100
$Sigma(i\omega_n)$
ω_n

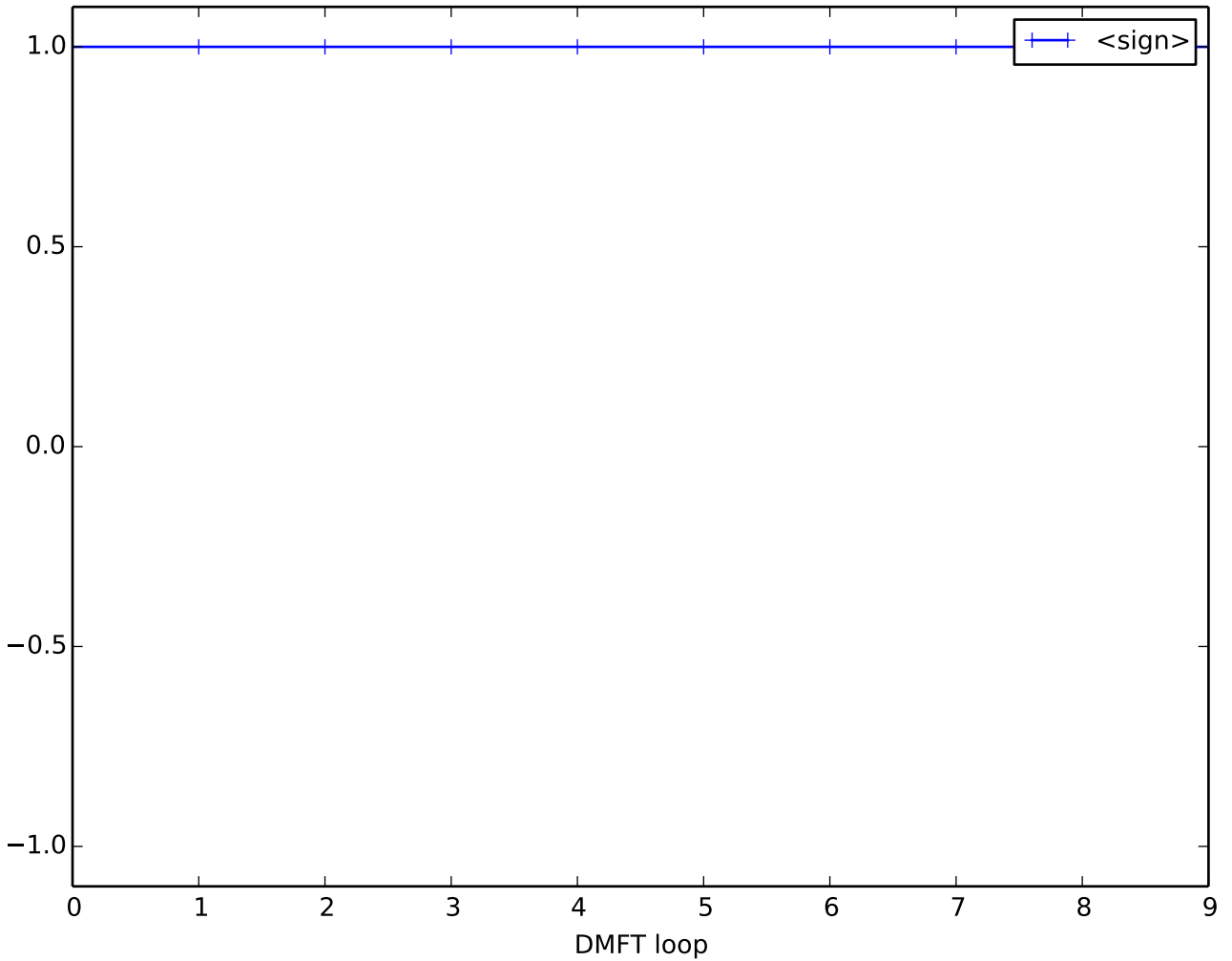

ImSigma_c_iw_up_00_it5
ImSigma_c_iw_up_00_it6
ImSigma_c_iw_up_00_it7
ImSigma_c_iw_up_00_it8
ImSigma_c_iw_up_00_it9
0.0
−0.2
−0.4
−0.6
−0.8
−1.0
−1.2
−1.4
−1.6
0
20
40
60
80
100
$Sigma(i\omega_n)$
ω_n

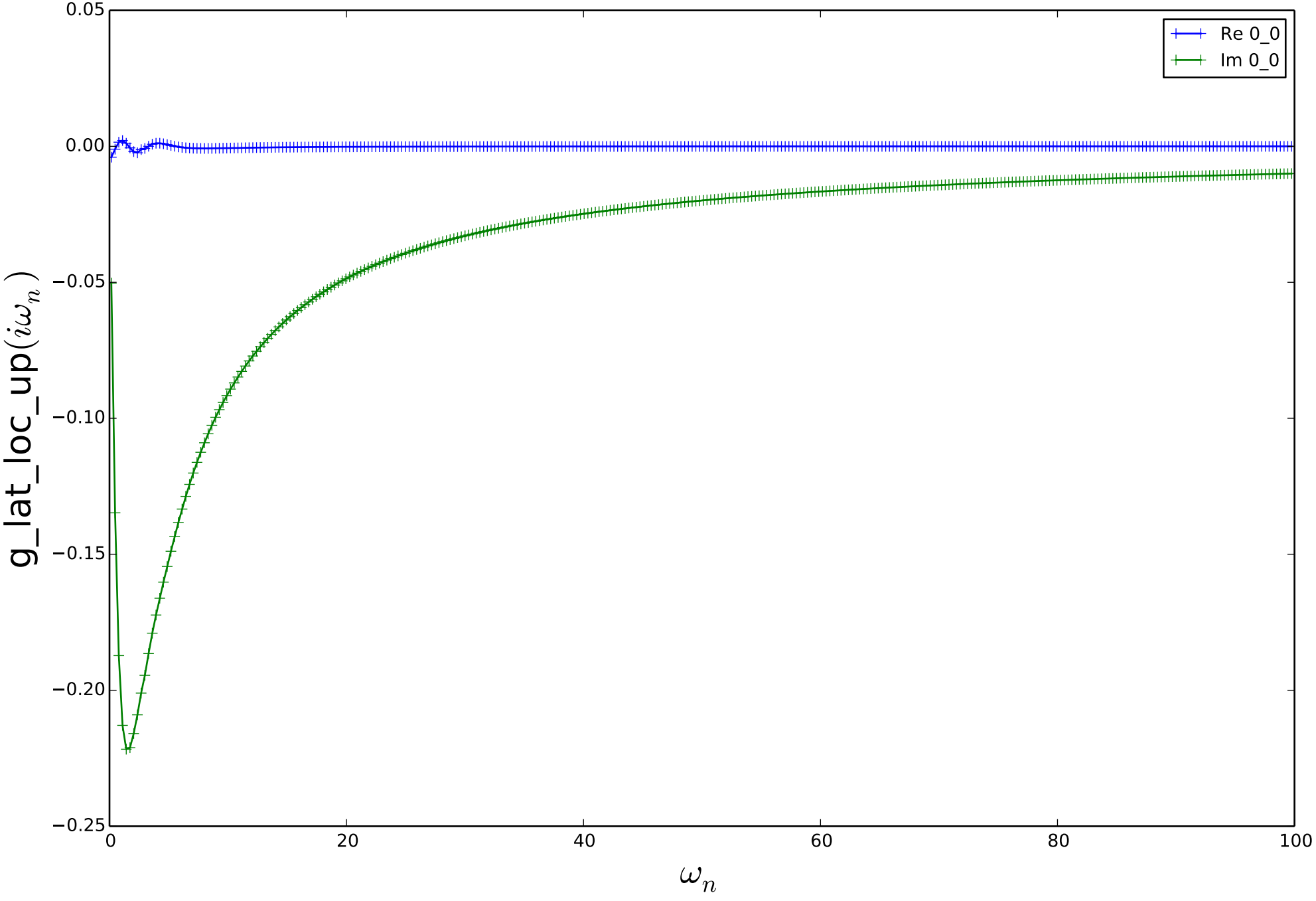

ImG_c_iw_up_00_at_ w0
ReG_c_iw_up_00_at_ w0
0.05
0.00
−0.05
−0.10
−0.15
−0.20
−0.25
−0.30
0
1
2
3
4
5
6
7
8
9
DMFT loop

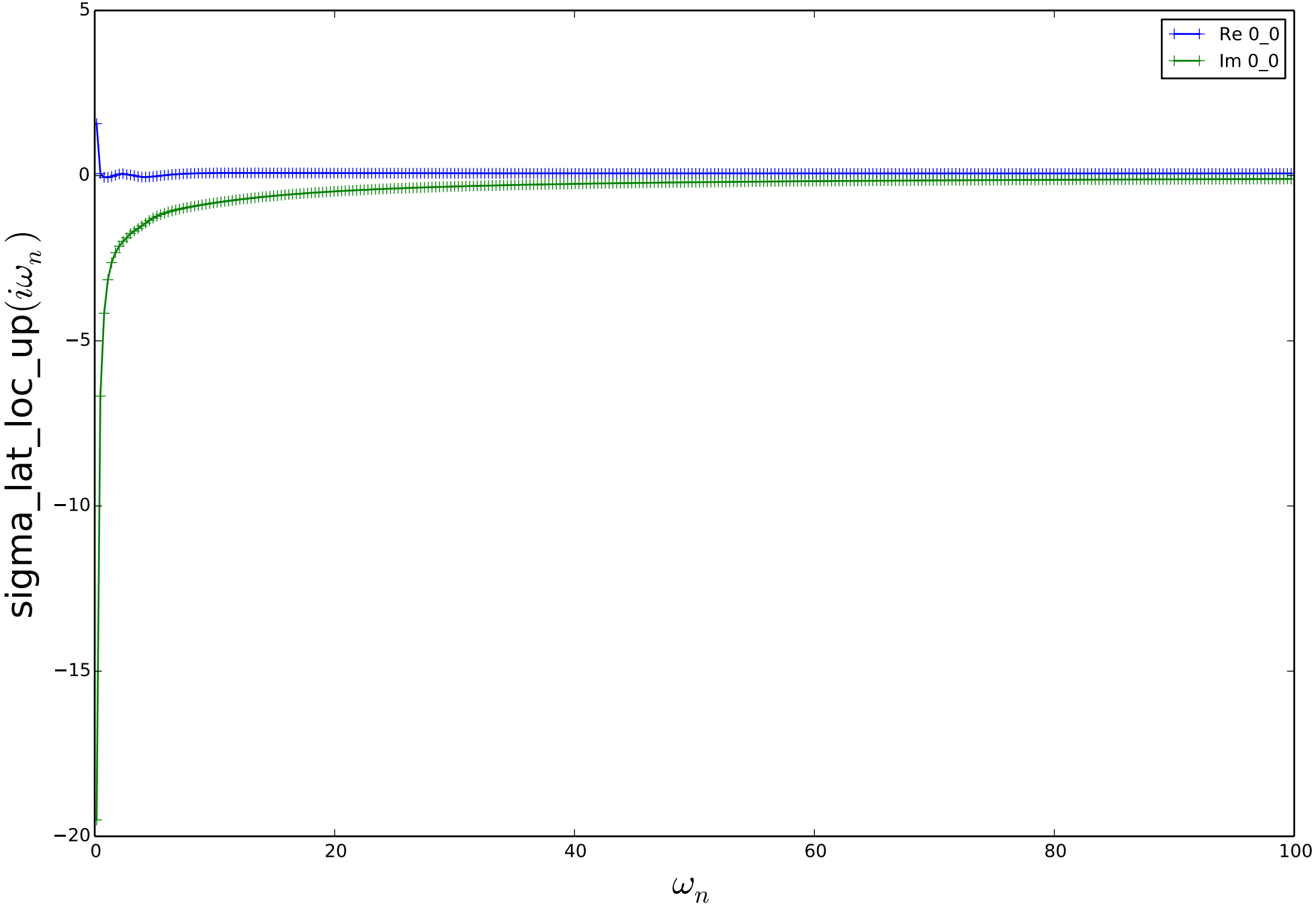

ImSigma_c_iw_up_00_at_ w0
ReSigma_c_iw_up_00_at_ w0
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
1
2
3
4
5
6
7
8
9
DMFT loop

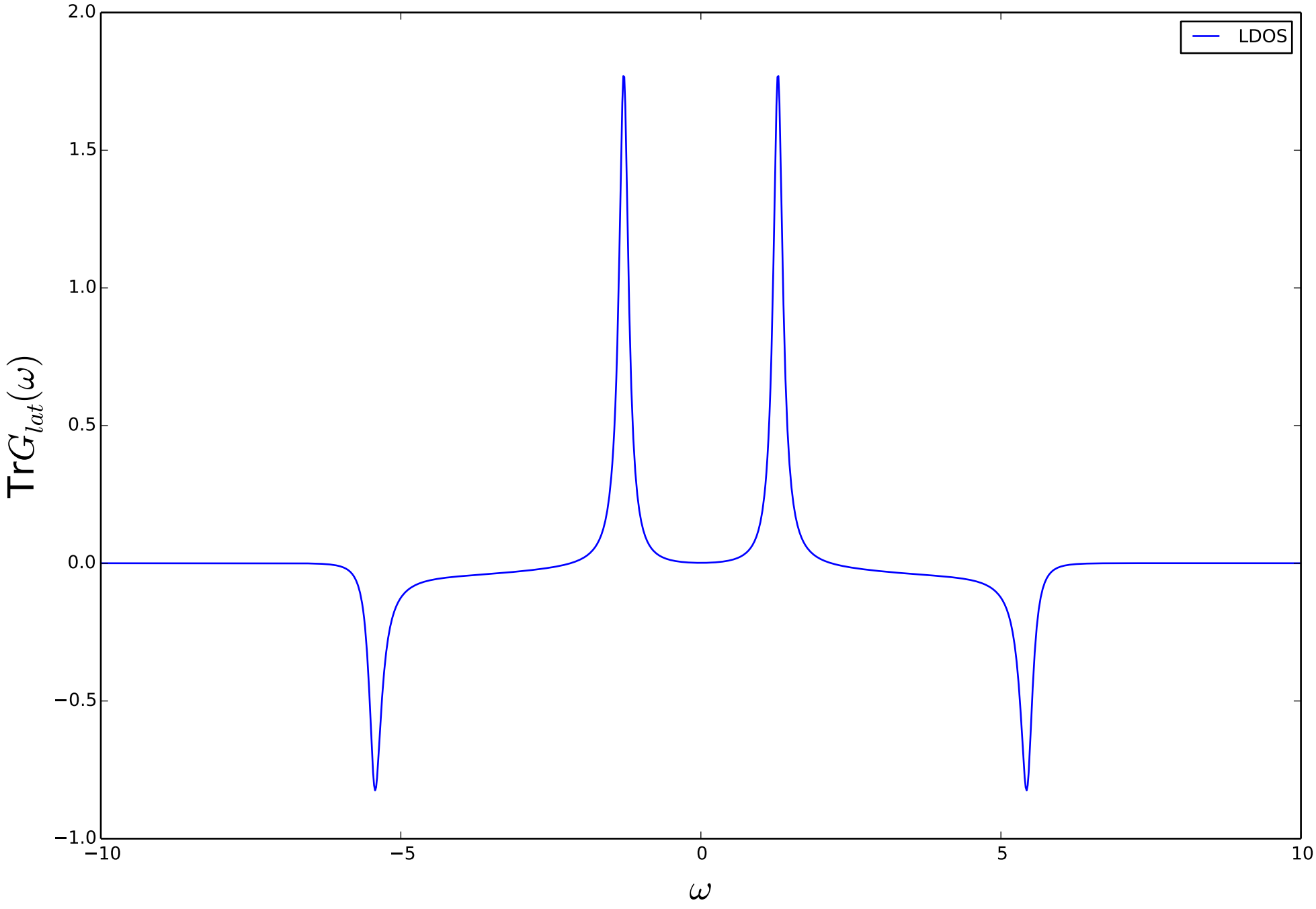

3.15
3.10
3.05
3.00
2.95
2.90
2.85
0
1
2
3
4
5
6
7
8
9
DMFT loop
μ

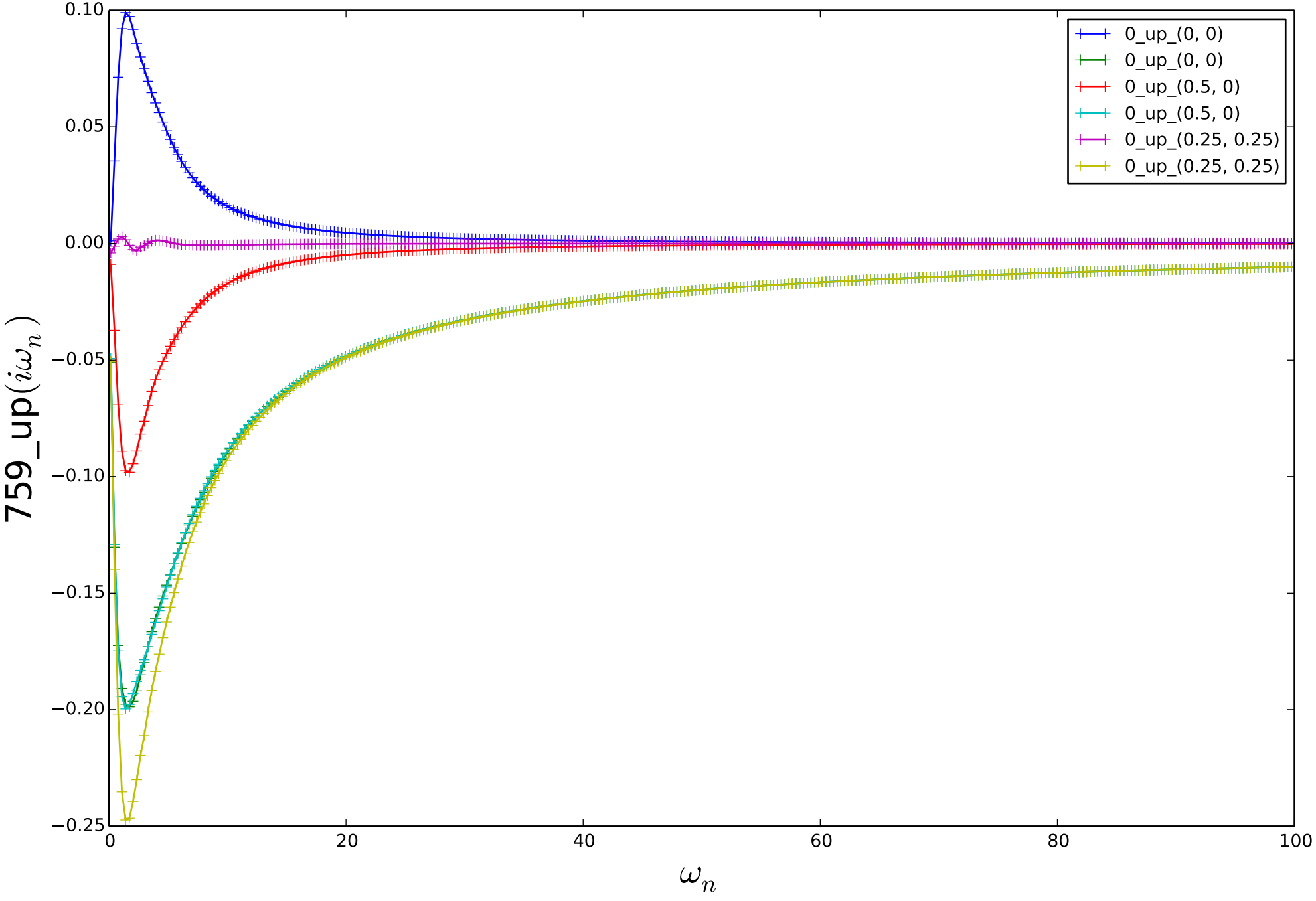

density
2.04
2.03
2.02
2.01
2.00
1.99
1.98
1.97
0
1
2
3
4
5
6
7
8
9
DMFT loop

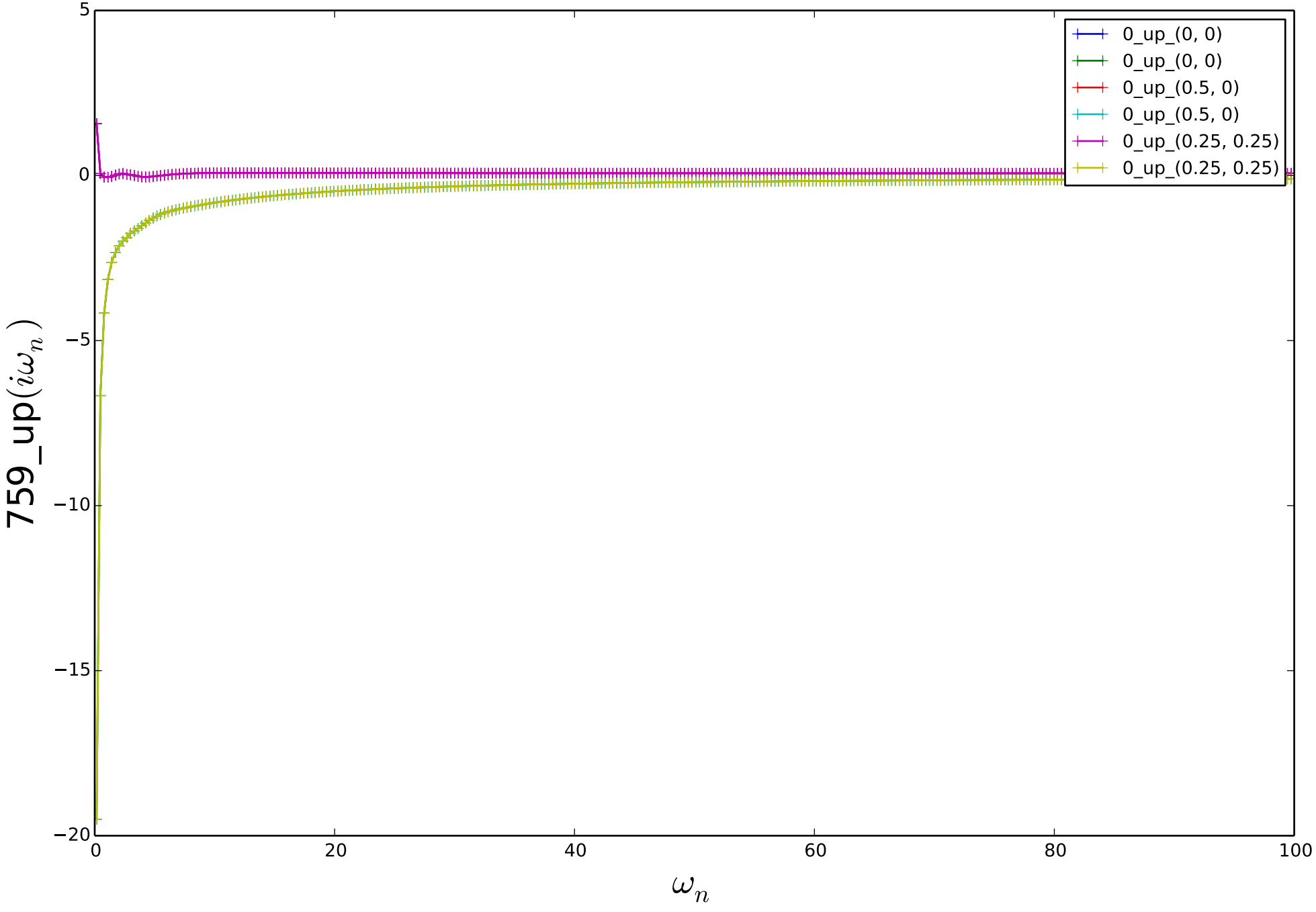

<sign>
1.0
0.5
0.0
−0.5
−1.0
0
1
2
3
4
5
6
7
8
9
DMFT loop

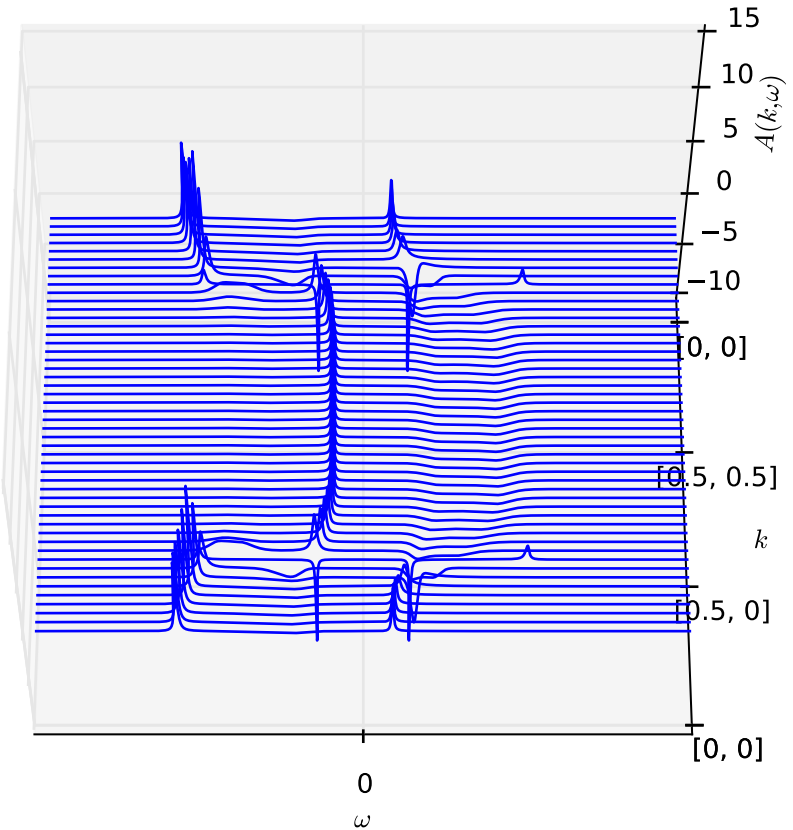

Re 0_0
Im 0_0
0.05
0.00
−0.05
−0.10
−0.15
−0.20
−0.25
0
20
40
60
80
100
g_lat_loc_up($i\omega_n$)
ω_n

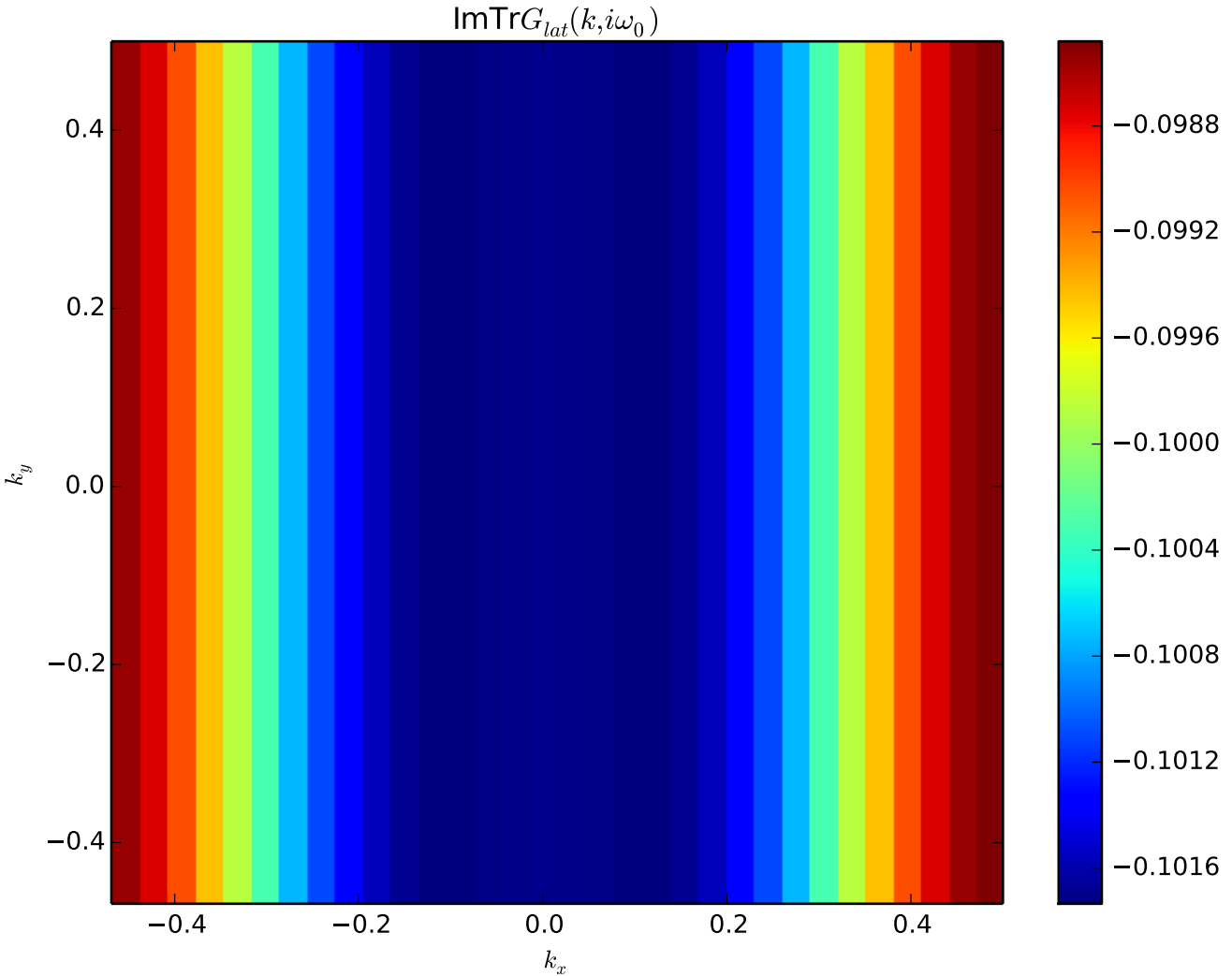

Re 0_0
Im 0_0
sigma_lat_loc_up($i\omega_n$)
ω_n
5
0
−5
−10
−15
−20
0
20
40
60
80
100

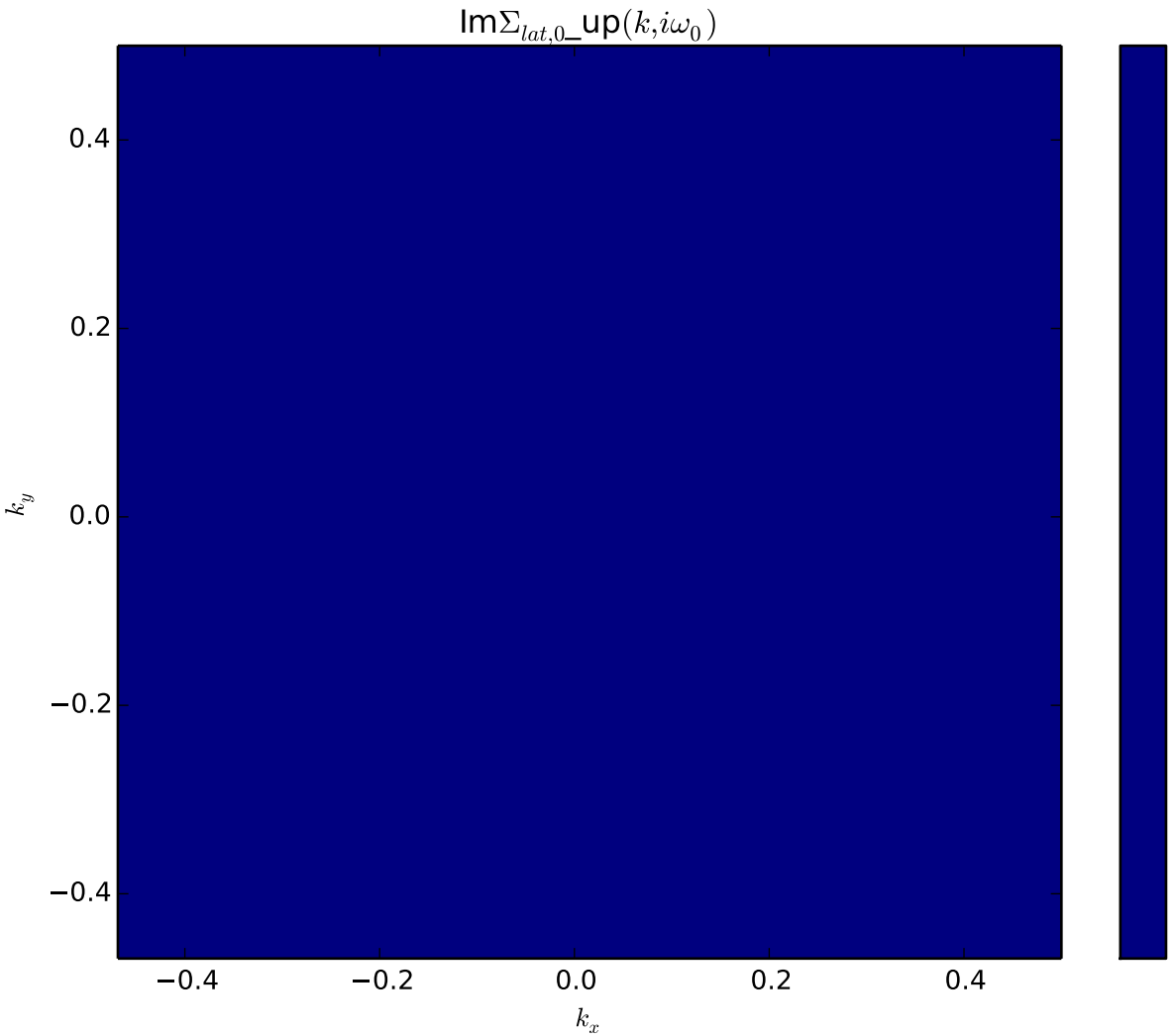

LDOS
2.0
1.5
1.0
0.5
0.0
−0.5
−1.0
−10
−5
0
5
10
$\mathrm{Tr}G_{lat}(\omega)$
ω

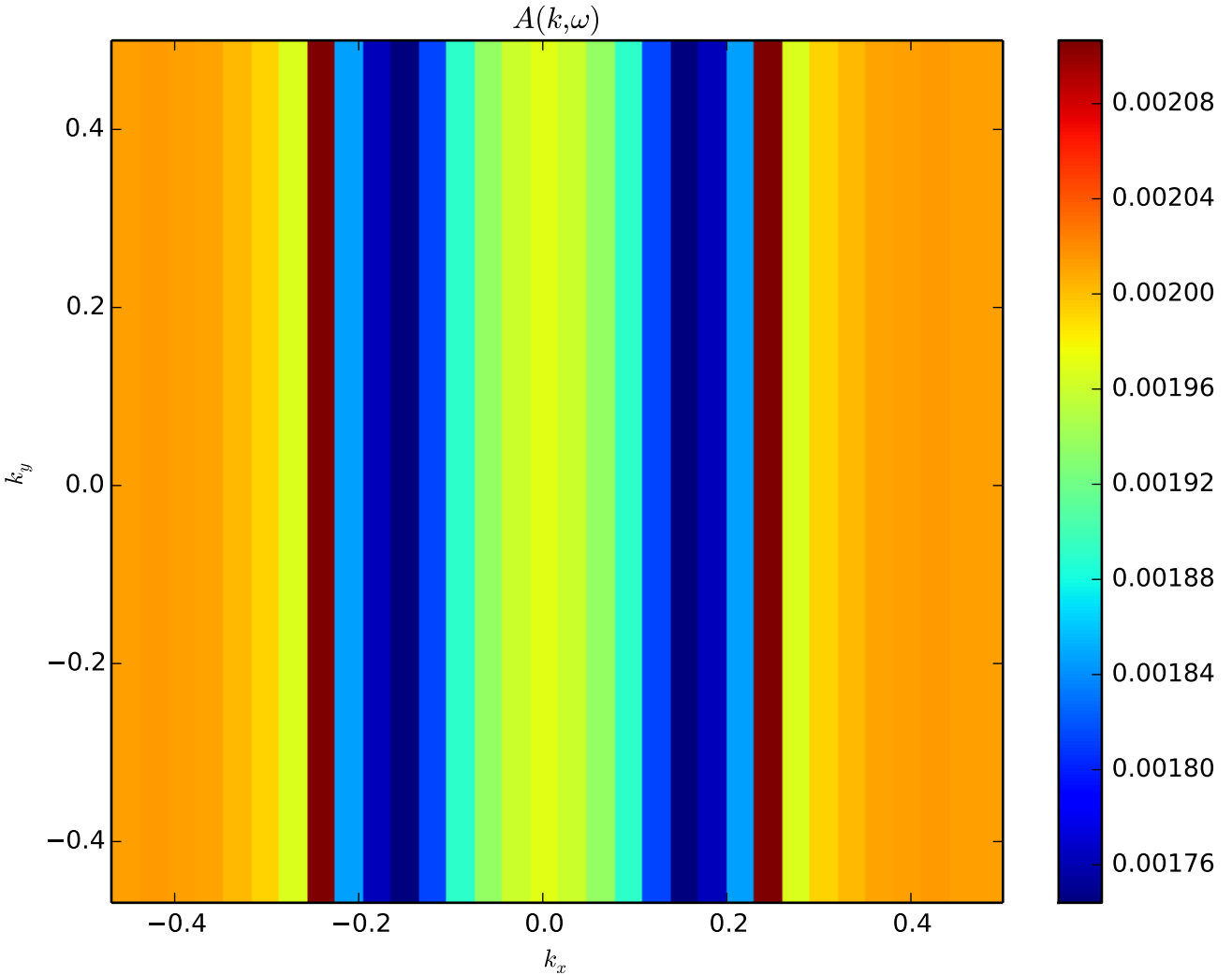

0_up_(0, 0)
0_up_(0, 0)
0_up_(0.5, 0)
0_up_(0.5, 0)
0_up_(0.25, 0.25)
0_up_(0.25, 0.25)
759_up($i\omega_n$)
ω_n
0.10
0.05
0.00
−0.05
−0.10
−0.15
−0.20
−0.25
0
20
40
60
80
100

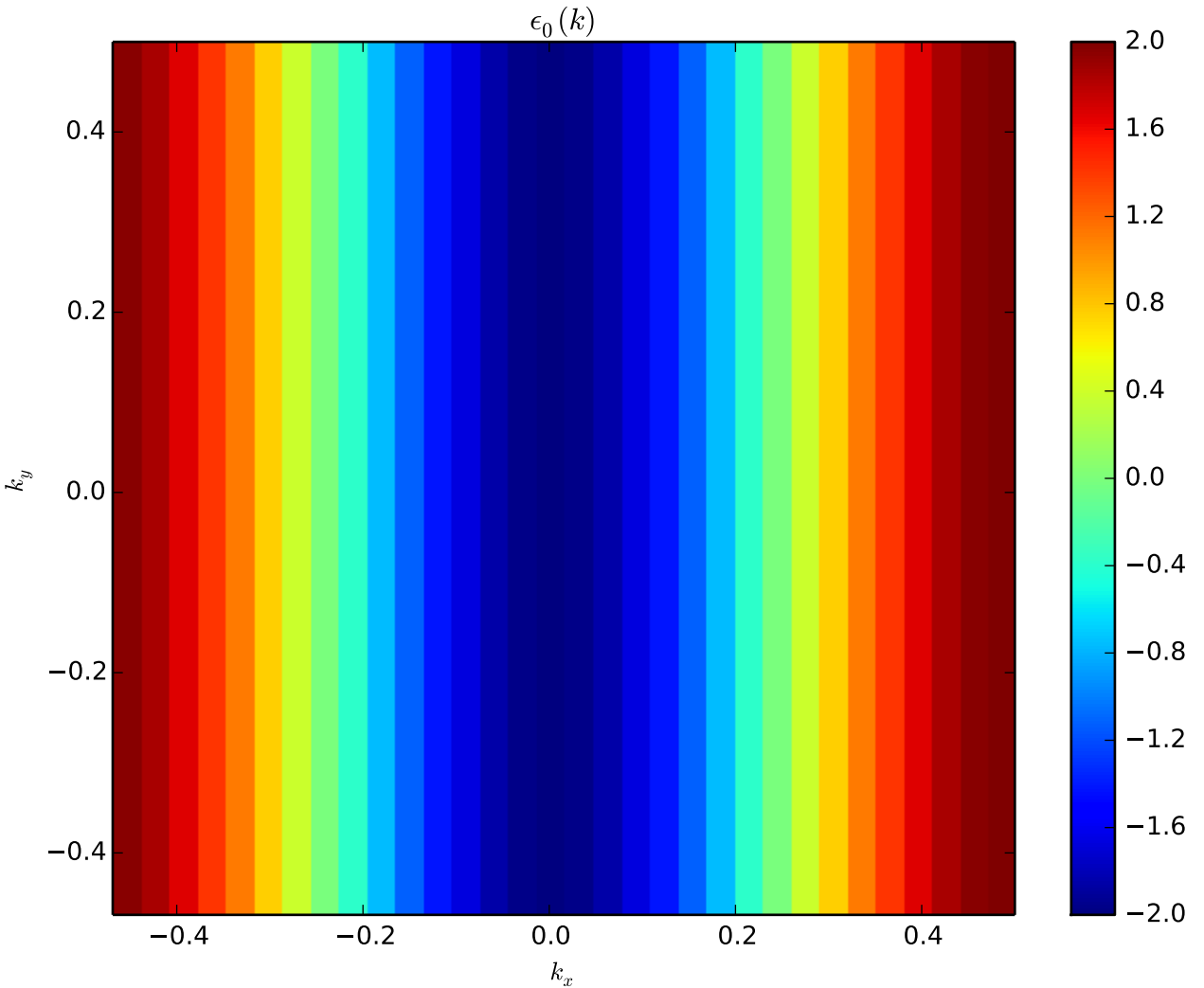

759_up($i\omega_n$)
ω_n
0_up_(0, 0)
0_up_(0, 0)
0_up_(0.5, 0)
0_up_(0.5, 0)
0_up_(0.25, 0.25)
0_up_(0.25, 0.25)
5
0
−5
−10
−15
−20
0
20
40
60
80
100


15
10
5
0
−5
−10
$A(k,\omega)$
[0, 0]
[0.5, 0.5]
k
[0.5, 0]
[0, 0]
0
ω


ImTr$G_{lat}(k,i\omega_0)$
0.4
0.2
0.0
−0.2
−0.4
k_y
−0.4
−0.2
0.0
0.2
0.4
k_x
−0.0988
−0.0992
−0.0996
−0.1000
−0.1004
−0.1008
−0.1012
−0.1016


Im$\Sigma_{lat,0}$_up$(k,i\omega_0)$
0.4
0.2
0.0
−0.2
−0.4
k_y
−0.4
−0.2
0.0
0.2
0.4
k_x


$A(k,\omega)$
0.4
0.2
0.0
−0.2
−0.4
k_y
−0.4
−0.2
0.0
0.2
0.4
k_x
0.00208
0.00204
0.00200
0.00196
0.00192
0.00188
0.00184
0.00180
0.00176


$\epsilon_0(k)$
0.4
0.2
0.0
−0.2
−0.4
k_y
−0.4
−0.2
0.0
0.2
0.4
k_x
2.0
1.6
1.2
0.8
0.4
0.0
−0.4
−0.8
−1.2
−1.6
−2.0

```
l_dim.h5
    Periodization
        bz_grid...
        bz_weights...
        d = 2
        eps...
        g_lat...
        g_lat_loc = g_lat_loc
        hopping
            (-1, 0)
                R = (-1, 0)
                h = [[-1]]
            (1, 0)
                R = (1, 0)
                h = [[-1]]
        lattice_basis
            0 = [-0.5, 0.5]
        lattice_vectors
            0 = [1, 0, 0]
            1 = [0, 200, 0]
        m_lat...
        n_kpts = 32
        reciprocal_lattice_vectors = [[ 6.28318531 -0.        ]
[-0.         0.03141593]]
        sigma_lat...
        sigma_lat_loc = sigma_lat_loc
        superlattice_basis
            0 = [0.5, 0]
            1 = [-0.5, 0]
        tr_g_lat...
        tr_g_lat_pade...
    Results
        0
            Delta_sym_tau = Delta_sym_tau
            G_c_iw = G_c_iw
            G_sym_iw = G_sym_iw
            G_sym_iw_raw = G_sym_iw_raw
            G_sym_l = G_sym_l
            Sigma_c_iw = Sigma_c_iw
            Sigma_c_iw_raw = Sigma_c_iw_raw
```

cdmft_code_version = 1.00
density = 2.00554861453
dmu = 0
eps...
loop_time = 89.0578010082
mu = 3
n_cpu = 1
parameters...
rbz_grid...
sign = 1.0
spectrum = [0.0, 0.6055512754639887, 0.6055512754639887, 0.6055512754639887, 2.605551275463986, 2.6055
sym_indices
0-down = [0]
0-up = [0]
1-down = [0]
1-up = [0]
triqs_code_version = 1.0
1
Delta_sym_tau = Delta_sym_tau
G_c_iw = G_c_iw
G_sym_iw = G_sym_iw
G_sym_iw_raw = G_sym_iw_raw
G_sym_l = G_sym_l
Sigma_c_iw = Sigma_c_iw
Sigma_c_iw_raw = Sigma_c_iw_raw
cdmft_code_version = 1.00
density = 1.98013158279
dmu = 0
eps...
loop_time = 1421655380.94
mu = 3
n_cpu = 1
parameters...
rbz_grid...
sign = 1.0
spectrum = [0.0, 0.6055512754639887, 0.6055512754639887, 0.6055512754639887, 2.605551275463986, 2.6055
sym_indices
0-down = [0]
0-up = [0]

```
        1-down = [0]
        1-up = [0]
    triqs_code_version = 1.0
2
    Delta_sym_tau = Delta_sym_tau
    G_c_iw = G_c_iw
    G_sym_iw = G_sym_iw
    G_sym_iw_raw = G_sym_iw_raw
    G_sym_l = G_sym_l
    Sigma_c_iw = Sigma_c_iw
    Sigma_c_iw_raw = Sigma_c_iw_raw
    cdmft_code_version = 1.00
    density = 2.01654094793
    dmu = 0
    eps...
    loop_time = 134.418996096
    mu = 3
    n_cpu = 1
    parameters...
    rbz_grid...
    sign = 1.0
    spectrum = [0.0, 0.6055512754639887, 0.6055512754639887, 0.6055512754639887, 2.605551275463986, 2.6055
    sym_indices
        0-down = [0]
        0-up = [0]
        1-down = [0]
        1-up = [0]
    triqs_code_version = 1.0
3
    Delta_sym_tau = Delta_sym_tau
    G_c_iw = G_c_iw
    G_sym_iw = G_sym_iw
    G_sym_iw_raw = G_sym_iw_raw
    G_sym_l = G_sym_l
    Sigma_c_iw = Sigma_c_iw
    Sigma_c_iw_raw = Sigma_c_iw_raw
    cdmft_code_version = 1.00
    density = 2.03470157794
    dmu = 0
    eps...
```

loop_time = 1421655425.14
mu = 3
n_cpu = 1
parameters...
rbz_grid...
sign = 1.0
spectrum = [0.0, 0.6055512754639887, 0.6055512754639887, 0.6055512754639887, 2.605551275463986, 2.6055
sym_indices
0-down = [0]
0-up = [0]
1-down = [0]
1-up = [0]
triqs_code_version = 1.0
4
Delta_sym_tau = Delta_sym_tau
G_c_iw = G_c_iw
G_sym_iw = G_sym_iw
G_sym_iw_raw = G_sym_iw_raw
G_sym_l = G_sym_l
Sigma_c_iw = Sigma_c_iw
Sigma_c_iw_raw = Sigma_c_iw_raw
cdmft_code_version = 1.00
density = 1.97940043574
dmu = 0
eps...
loop_time = 178.36206007
mu = 3
n_cpu = 1
parameters...
rbz_grid...
sign = 1.0
spectrum = [0.0, 0.6055512754639887, 0.6055512754639887, 0.6055512754639887, 2.605551275463986, 2.6055
sym_indices
0-down = [0]
0-up = [0]
1-down = [0]
1-up = [0]
triqs_code_version = 1.0
5

Delta_sym_tau = Delta_sym_tau
G_c_iw = G_c_iw
G_sym_iw = G_sym_iw
G_sym_iw_raw = G_sym_iw_raw
G_sym_l = G_sym_l
Sigma_c_iw = Sigma_c_iw
Sigma_c_iw_raw = Sigma_c_iw_raw
cdmft_code_version = 1.00
density = 1.99611642468
dmu = 0
eps...
loop_time = 51.8836810589
mu = 3
n_cpu = 1
parameters...
rbz_grid...
sign = 1.0
spectrum = [0.0, 0.6055512754639887, 0.6055512754639887, 0.6055512754639887, 2.605551275463986, 2.6055
sym_indices
    0-down = [0]
    0-up = [0]
    1-down = [0]
    1-up = [0]
triqs_code_version = 1.0
6
Delta_sym_tau = Delta_sym_tau
G_c_iw = G_c_iw
G_sym_iw = G_sym_iw
G_sym_iw_raw = G_sym_iw_raw
G_sym_l = G_sym_l
Sigma_c_iw = Sigma_c_iw
Sigma_c_iw_raw = Sigma_c_iw_raw
cdmft_code_version = 1.00
density = 2.01047312151
dmu = 0
eps...
loop_time = 1421655868.87
mu = 3
n_cpu = 1
parameters...

rbz_grid...
sign = 1.0
spectrum = [0.0, 0.6055512754639887, 0.6055512754639887, 0.6055512754639887, 2.605551275463986, 2.6055
sym_indices
0-down = [0]
0-up = [0]
1-down = [0]
1-up = [0]
triqs_code_version = 1.0
7
Delta_sym_tau = Delta_sym_tau
G_c_iw = G_c_iw
G_sym_iw = G_sym_iw
G_sym_iw_raw = G_sym_iw_raw
G_sym_l = G_sym_l
Sigma_c_iw = Sigma_c_iw
Sigma_c_iw_raw = Sigma_c_iw_raw
cdmft_code_version = 1.00
density = 2.01063089856
dmu = 0
eps...
loop_time = 95.6962771416
mu = 3
n_cpu = 1
parameters...
rbz_grid...
sign = 1.0
spectrum = [0.0, 0.6055512754639887, 0.6055512754639887, 0.6055512754639887, 2.605551275463986, 2.6055
sym_indices
0-down = [0]
0-up = [0]
1-down = [0]
1-up = [0]
triqs_code_version = 1.0
8
Delta_sym_tau = Delta_sym_tau
G_c_iw = G_c_iw
G_sym_iw = G_sym_iw
G_sym_iw_raw = G_sym_iw_raw

G_sym_l = G_sym_l
Sigma_c_iw = Sigma_c_iw
Sigma_c_iw_raw = Sigma_c_iw_raw
cdmft_code_version = 1.00
density = 1.97718354332
dmu = 0
eps...
loop_time = 1421655912.72
mu = 3
n_cpu = 1
parameters...
rbz_grid...
sign = 1.0
spectrum = [0.0, 0.6055512754639887, 0.6055512754639887, 0.6055512754639887, 2.605551275463986, 2.6055
sym_indices
0-down = [0]
0-up = [0]
1-down = [0]
1-up = [0]
triqs_code_version = 1.0
9
Delta_sym_tau = Delta_sym_tau
G_c_iw = G_c_iw
G_sym_iw = G_sym_iw
G_sym_iw_raw = G_sym_iw_raw
G_sym_l = G_sym_l
Sigma_c_iw = Sigma_c_iw
Sigma_c_iw_raw = Sigma_c_iw_raw
cdmft_code_version = 1.00
density = 2.00977190484
dmu = 0
eps...
loop_time = 139.743076086
mu = 3
n_cpu = 1
parameters...
rbz_grid...
sign = 1.0
spectrum = [0.0, 0.6055512754639887, 0.6055512754639887, 0.6055512754639887, 2.605551275463986, 2.6055
sym_indices

```
                        0-down = [0]
                        0-up = [0]
                        1-down = [0]
                        1-up = [0]
                triqs_code_version = 1.0
        n_dmft_loops = 10
    parameters...
l_dim.h5
    parameters
        Sigma_c_iw = Sigma_c_iw
        archive = l_dim.h5
        beta = 20
        clipping_threshold = 0
        clustersite_pos = [[-0.25, 0], [0.25, 0]]
        density = False
        dmu = 0
        hop
            (-1, 0)
                key = (-1, 0)
                val = [[ 0.  0.]
[-1.  0.]]
            (0, 0)
                key = (0, 0)
                val = [[ 0. -1.]
[-1.  0.]]
            (1, 0)
                key = (1, 0)
                val = [[ 0. -1.]
[ 0.  0.]]
        impose_paramagnetism = False
        lattice_vectors = [[2, 0, 0], [0, 200, 0]]
        length_cycle = 10
        make_histograms = False
        max_time = -1
        measure_g_l = True
        measure_g_tau = False
        measure_pert_order = True
        mix_coeff = 1
        mu = 3
```

n_cycles = 500000
n_iw = 1025
n_kpts = 32
n_legendre = 27
n_tau = 10001
n_warmup_cycles = 1000
scheme = cellular_dmft
symmetry_transformation = [[0.7071067811865475, 0.7071067811865475], [0.7071067811865475, -0.707106781186547
t = -1
u = 6
use_trace_estimator = False
v = [[0, 0], [0, 0]]
verbosity =