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Erratum: Solution to the many-body problem in one point (*New J. Phys.* 16 113025)

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Keywords: many-body Green's function, Kadanoff–Baym equation, GW, GW + cumulant, one-point model

Due to a typesetting error, the following figures were not reproduced correctly. In addition, in the caption of figure 3, u^0_{lin}/V should read u^0_{lin}/v

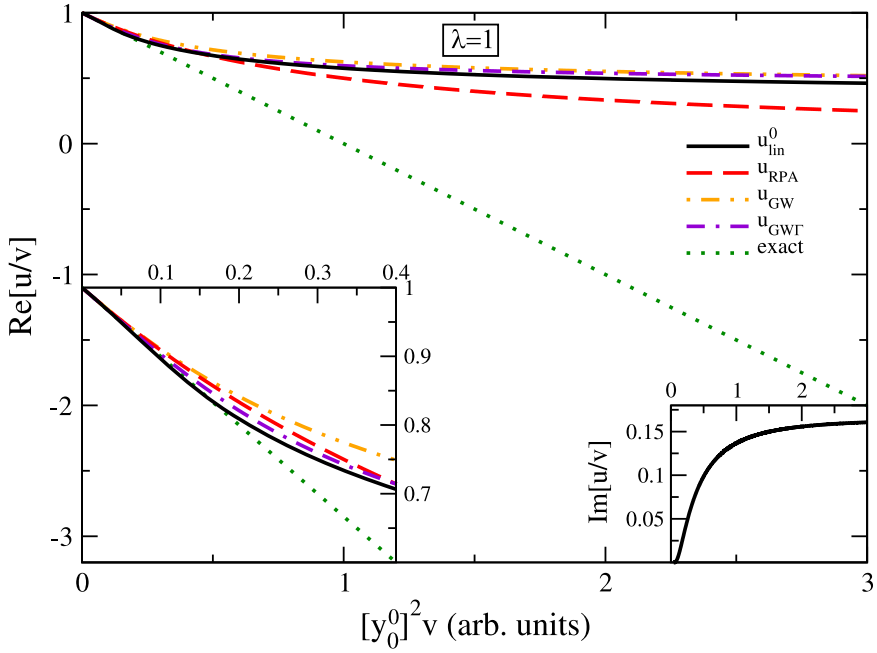

Figure 3. The real part of the screened interaction in one point u/v as a function of the interaction $[y_0^0]^2 v$ ($\lambda = 1$). Continuous line (black): u^0_{lin}/v; dashed line (red): u_{RPA}/v; double-dot-dashed line (orange): u_{GW}/v; dot-double-dashed line (violet): $u_{GW\Gamma}/v$; dotted line (green): exact solution. Inset (bottom-left corner): zoom for small $[y_0^0]^2 v$. Inset (bottom-right corner): the imaginary part of u/v.

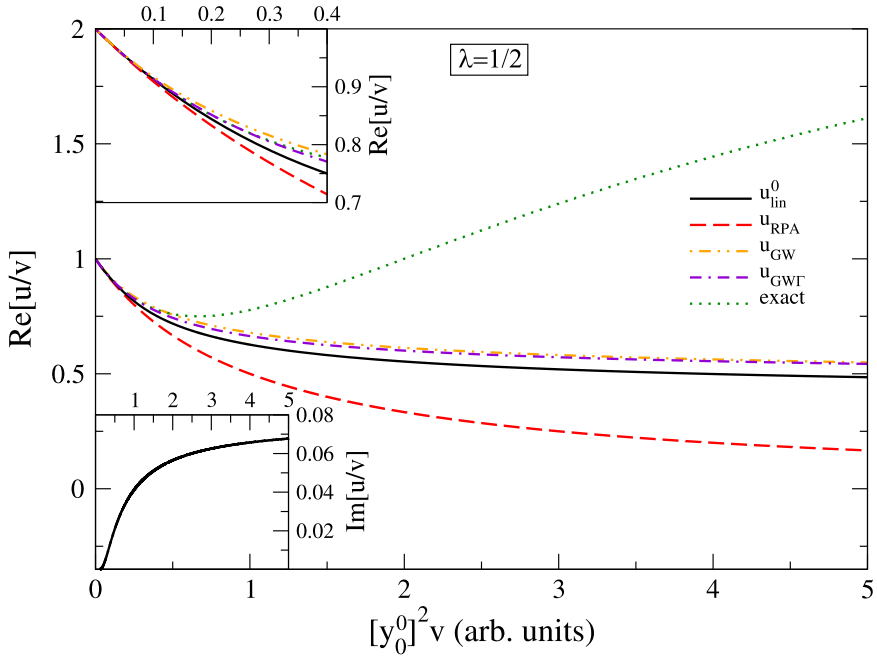

Figure 4. The real part of the screened interaction in one point u/v as a function of the interaction $[y_0^0]^2 v$ ($\lambda = \frac{1}{2}$). Continuous line (black): u^0_{lin}/y_0^0; dashed line (red): u_{RPA}/v; double-dot-dashed line (orange): u_{GW}/v; dot-double-dashed line (violet): $u_{GW\Gamma}/v$; dotted line (green): exact solution. Inset (top-left corner): zoom for small $[y_0^0]^2 v$. Inset (bottom-left corner): the imaginary part of u/v.

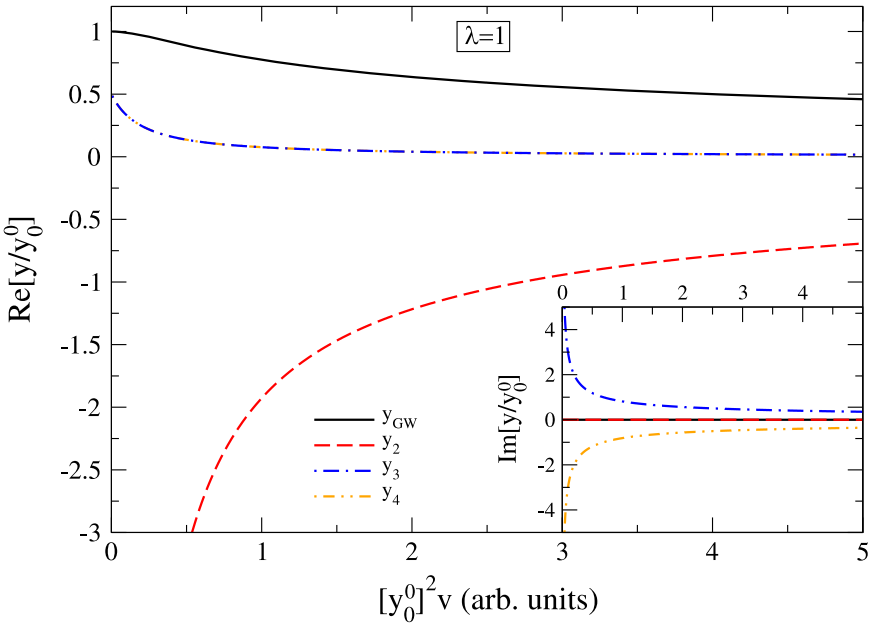

Figure 5. The real part of the *GW* Green's function in one point as a function of the interaction $[y_0^0]^2 v$ ($\lambda = 1$). Continuous line (black): the physical solution y_{GW}/y_0^0; dashed line (red): the non-physical *GW* solution y_2/y_0^0; dot-dashed line (blue): the non-physical *GW* solution y_3/y_0^0; double-dot-dashed line (orange): the non-physical *GW* solution y_4/y_0^0. Inset: the imaginary part of the *GW* Green's function.

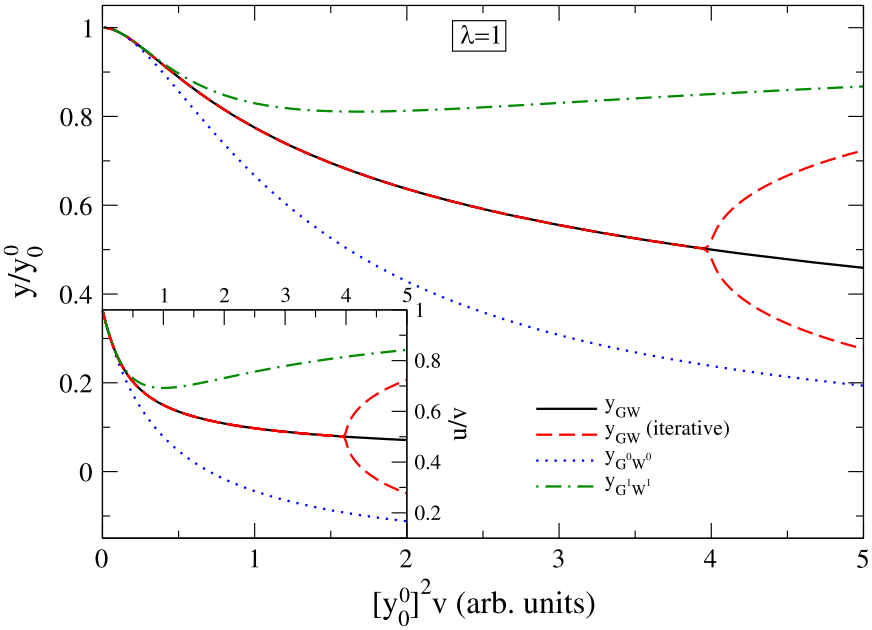

Figure 6. The *GW* Green's function in one point as a function of the interaction $[y_0^0]^2 v$ ($\lambda = 1$). Continuous line (black): the physical solution y_{GW}/y_0^0; dashed line (red): the iterative *GW* result (see main text for details); dotted line (blue): $y_{G^0W^0}/y_0^0$; dot-dashed line (green): $y_{G^1W^1}/y_0^0$. Inset: the screened interaction u_{GW}/v as a function of the interaction $[y_0^0]^2 v$.

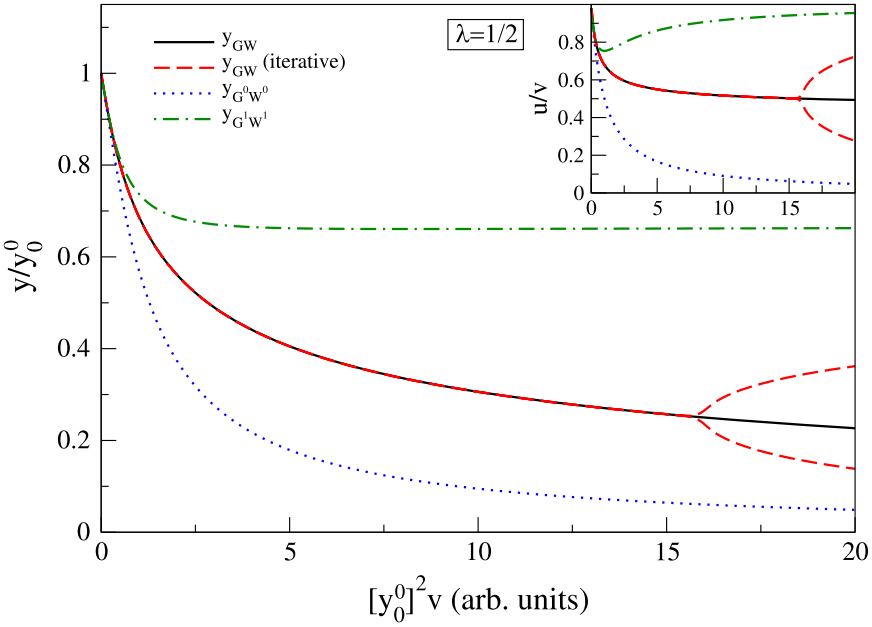

Figure 7. The *GW* Green's function in one point as a function of the interaction $[y_0^0]^2 v$ ($\lambda = \frac{1}{2}$). Continuous line (black): the physical solution y_{GW}/y_0^0; dashed line (red): the iterative *GW* result (see main text for details); dotted line (blue): $y_{G^0W^0}/y_0^0$; dot-dashed line (green): $y_{G^1W^1}/y_0^0$. Inset: the screened interaction u_{GW}/v as a function of the interaction $[y_0^0]^2 v$.

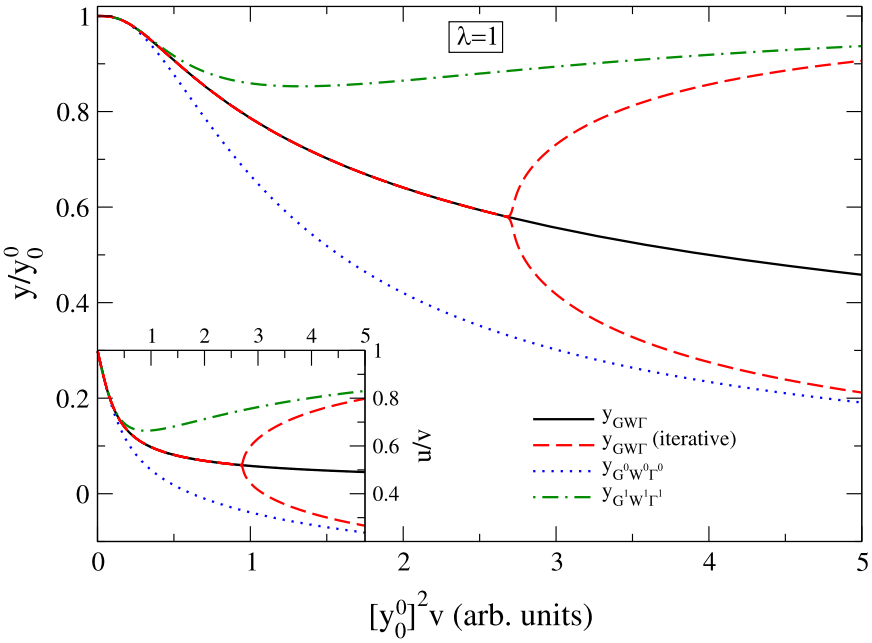

Figure 8. The *GWΓ* Green's function in one point as a function of the interaction $[y_0^0]^2 v$ ($\lambda = 1$). Continuous line (black): the physical solution $y_{GW\Gamma}/y_0^0$; dashed line (red): the iterative *GWΓ* result (see main text for details); dotted line (blue): $y_{G^0W^0\Gamma^0}/y_0^0$; dot-dashed line (green): $y_{G^1W^1\Gamma^1}/y_0^0$. Inset: the screened interaction $u_{GW\Gamma}/v$ as a function of the interaction $[y_0^0]^2 v$.