Step A. For $q = 0, 1, \ldots, n$, do

1. Partition $V$ into $V_1$ and $V_2$ of sizes $n_1$ and $n_2$.
2. For each $X_1 \subseteq V_1$, do
   a) For each independent $Y_1 \subseteq X_1$, do
   $$h[V_2 \setminus N(Y_1)] \leftarrow h[V_2 \setminus N(Y_1)] + z^{|Y_1|}$$
   b) For each independent $Y_2 \subseteq V_2$, do
   $$l[Y_2] \leftarrow z^{|Y_2|}$$
   c) $h \leftarrow (h\zeta') \cdot l$
   d) $h \leftarrow h\zeta$
   e) For each $X_2 \subseteq V_2$, do
   $$r \leftarrow r + (-1)^{n-|X_1|-|X_2|} \cdot h[X_2]^q$$
3. Return coefficient $c_n$ of $z^n$ in $r$.

Step B. Construct interpolating polynomial $\chi_G(t)$ on points $(q, c_{nq})$.

Step C. Return $\chi_G(t)$.