$$\tilde{V}_n \tilde{V}_m^* = \iint \sum_n V_1(x-nD,y)\, e^{-i(q_x x+q_y y)}\, dx\,dy \; * \iint \sum_m V_1(y_1,z-nD)\, e^{i(q_y y_1+q_z z)}\, dy\,dz$$

$$= \iint \sum_n V_1(x-nD,y)\, e^{-iq_x x}\, dx\; e^{-iq_y y}\, dy \; * \iint$$

$$= \sum_n e^{-iq_x nD} \iint V_1(x',y)\, e^{-i(q_x x'+q_y y)}\, dx'\,dy \; * \sum_m e^{+iq_z nD} \iint V_1(y,z')\, e^{i(q_y y+q_z z')}\, dy\,dz$$

$$= \frac{2\pi}{D} \sum_{n'} \delta(q_x - q_{n'}) \left( -\frac{2\pi}{D} \sum_{m'} \delta(q_z - q_{m'}) \right) \tilde{V}_1(q_x, q_y)\, \tilde{V}_1^*(q_x, q_z)$$

② $\Gamma_2(\vec{k}) = \frac{n_{xyz}}{\hbar^2} \frac{(-(2\pi)^2)}{D^2}$ (negative?)