$$\text{Order parameter} \quad \left(\langle\tilde{0}|PP^{\dagger}|\tilde{0}\rangle\right)^{1/2} = \begin{cases} \alpha_0 = \sum_{\nu>0} U'_\nu V'_\nu \\ \alpha_{dyn} = \sum_{\nu>0} U^{eff}_\nu V^{eff}_\nu \end{cases}$$

pairing vibrations

$$\left(U^{eff}_\nu\right)^2 = 2Y^2_a(j_\nu)/\Omega_\nu; \quad \left(U^{eff}_\nu\right)^2 = 1 - \left(U^{eff}_\nu\right)^2$$

$$\left.\begin{matrix} X_n(j_\nu) \\ Y_n(j_\nu) \end{matrix}\right\} = \frac{\left(\sqrt{\Omega_j}/2\right)\Gamma_n}{2|E_j| \mp W_n}$$

pairing rotations

$$\left.\begin{matrix} U'_\nu \\ V'_\nu \end{matrix}\right\} = \frac{1}{\sqrt{2}}\left(1 \pm \frac{\epsilon_\nu}{\sqrt{\epsilon^2_\nu + \Delta^2}}\right)^{1/2}$$