

Superconducting order  $\Psi(\mathbf{r})$ :

$$\left\langle c_{i\alpha}^\dagger c_{j\beta}^\dagger \right\rangle = \varepsilon_{\alpha\beta} \left[ \sum_{\mathbf{k}} \Delta_S(\mathbf{k}) e^{i\mathbf{k} \cdot (\mathbf{r}_i - \mathbf{r}_j)} \right] \Psi \left( (\mathbf{r}_i + \mathbf{r}_j)/2 \right)$$

Charge/bond order  $\Phi_{x,y}(\mathbf{r})$  at wavevectors  $\mathbf{Q}_{x,y}$ :

$$\begin{aligned} \left\langle c_{i\alpha}^\dagger c_{j\beta} \right\rangle = & \delta_{\alpha\beta} \left[ \sum_{\mathbf{k}} P_{\mathbf{Q}_x}(\mathbf{k}) e^{i\mathbf{k} \cdot (\mathbf{r}_i - \mathbf{r}_j)} \right] e^{i\mathbf{Q}_x \cdot (\mathbf{r}_i + \mathbf{r}_j)/2} \Phi_x \left( (\mathbf{r}_i + \mathbf{r}_j)/2 \right) \\ & + \delta_{\alpha\beta} \left[ \sum_{\mathbf{k}} P_{\mathbf{Q}_y}(\mathbf{k}) e^{i\mathbf{k} \cdot (\mathbf{r}_i - \mathbf{r}_j)} \right] e^{i\mathbf{Q}_y \cdot (\mathbf{r}_i + \mathbf{r}_j)/2} \Phi_y \left( (\mathbf{r}_i + \mathbf{r}_j)/2 \right) \end{aligned}$$