Consider modulation in a bilocal variable at the Cu sites $\mathbf{r}_i$ and $\mathbf{r}_j$

$$\left\langle c^\dagger_{i\alpha} c_{j\alpha} \right\rangle \sim \left[\sum_{\mathbf{k}} P_{\mathbf{Q}}(\mathbf{k}) e^{i\mathbf{k}\cdot(\mathbf{r}_i - \mathbf{r}_j)} \right] e^{i\mathbf{Q}\cdot(\mathbf{r}_i + \mathbf{r}_j)/2}$$

The wavevector $\mathbf{Q}$ is associated with a modulation in the *average* co-ordinate $(\mathbf{r}_i + \mathbf{r}_j)/2$: this determines the wavevector of the X-ray scattering peak.
The interesting part is the dependence on the *relative* co-ordinate $\mathbf{r}_i - \mathbf{r}_j$. The order parameter $P_{\mathbf{Q}}(\mathbf{k})$ can always be expanded as

$$\begin{aligned} P_{\mathbf{Q}}(\mathbf{k}) &= \sum_\ell \mathcal{P}_\ell \, \phi_\ell(\mathbf{k}) \\ \phi_\ell(\mathbf{k}) &= \{1, \cos k_x + \cos k_y, \cos k_x - \cos k_y, \sin k_x - \sin k_y, \ldots\} \end{aligned}$$

The usual charge-density-wave has only $\mathcal{P}_s \neq 0$, and so the density wave is non-zero only if $\mathbf{r}_i = \mathbf{r}_j$.
The bond-ordered state has predominantly $\mathcal{P}_{s'}, \mathcal{P}_d$ non-zero: in this case the density wave is non-zero only if $\mathbf{r}_i$ and $\mathbf{r}_j$ are nearest neighbors.
States with spontaneous currents have $\mathcal{P}_p$ non-zero: they break time-reversal