

$$f \in L_1(\mathbb{R}^2), \xi \in \mathcal{M} \& c_\eta(f), \eta \in \mathcal{D}_{d,\Delta} \setminus \mathcal{M}_\xi \boxed{Q} \in \mathcal{S}$$

Figure 1: Illustration of quasi-interpolation operator Q . Here $c_\xi(f) = \gamma_\xi(F_{d,\tau_\xi} f)$ is the B-coefficients corresponding to ξ , τ_ξ is the triangle that contains ξ , $F_{d,\tau_\xi} f$ is the averaged Taylor polynomial of degree d associated with τ_ξ ; $c_\eta(f)$ is a linear combination of $\{c_\xi(f)\}_{\xi \in \mathcal{M}_\eta}$, $\mathcal{M}_\eta \subseteq \text{star}^\wedge(\tau_\eta)$, τ_η is the triangle that contains η .