

# Math in Typst rendered through Mitex

This a Typst document with a simple inline LaTeX equation  $\hat{F}$  and a complicated LaTeX block equation:

$$\begin{aligned}\tilde{\mathcal{L}}^{(k)} &= \sum_{j=1}^T \sum_{i \in I_j} \left[ g_i f_k(\mathbf{x}_i) \quad \quad \quad + \frac{1}{2} h_i f_k^2(\mathbf{x}_i) \right] + \gamma T + \frac{1}{2} \lambda \sum_{j=1}^T w_j^2 \\ &= \sum_{j=1}^T \sum_{i \in I_j} \left[ g_i w_j \quad \quad \quad + \frac{1}{2} h_i w_j^2 \right] + \gamma T + \frac{1}{2} \lambda \sum_{j=1}^T w_j^2 \\ &= \sum_{j=1}^T \left[ w_j \left( \sum_{i \in I_j} g_i \right) \quad + \frac{1}{2} w_j^2 \left( \sum_{i \in I_j} h_i + \lambda \right) \right] + \gamma T\end{aligned}$$