

$$\frac{1}{T} \sum_{t=1}^T \mathbb{E} \left[ \left\| \nabla \mathcal{L}_k \big|_{\theta^t} \right\|_2^2 \right] \leq \frac{4L_{\theta x}^2 \epsilon}{\lambda} + 4\delta \sqrt{\frac{L\Delta}{T}}$$