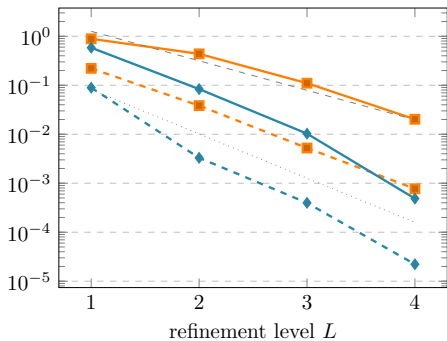
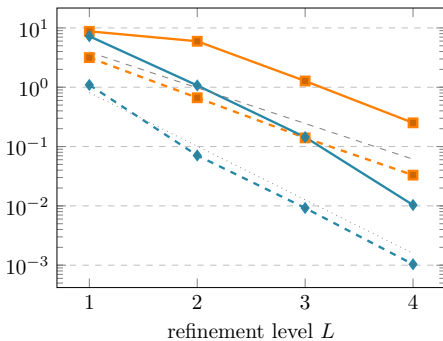


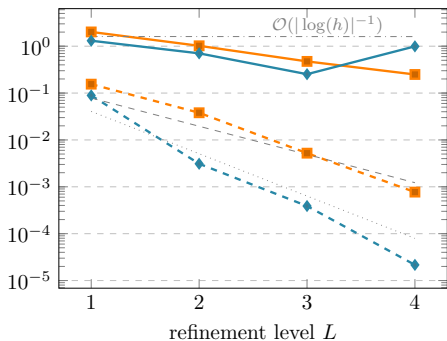
$$T = 0.5, \|(u - L_{\Delta t} \underline{u}_1)\|_{L^\infty(0,T;L^2(\Omega_R))}$$



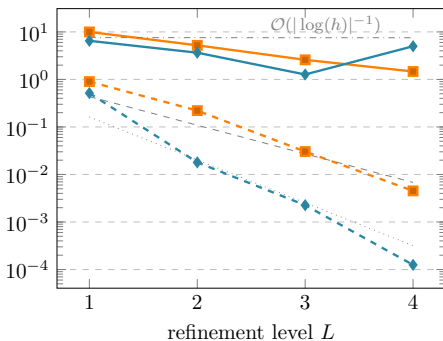
$$T = 0.5, \|\partial_t(u - L_{\Delta t} \underline{u}_1)\|_{L^2(0,T;L^2(\Omega_R))}$$



$$T = 0.1, \|(u - L_{\Delta t} \underline{u}_1)\|_{L^\infty(0,T;L^2(\Omega_R))}$$



$$T = 0.1, \|\partial_t(u - L_{\Delta t} \underline{u}_1)\|_{L^2(0,T;L^2(\Omega_R))}$$



$$\text{---} \blacksquare \text{---} k=2 \quad \text{---} \blacklozenge \text{---} k=3 \quad \cdots \mathcal{O}(h^2) \quad \text{---} \mathcal{O}(h^3)$$