



A contour plot of a loss function $L_{\mathcal{B}}$ with elliptical level sets. The center of the ellipses is white, transitioning through red, orange, yellow, and green to blue at the edges. A black dot represents the current parameter vector $w(t)$, and a slightly larger, semi-transparent grey dot represents the next step $w(t+1)$ after a gradient descent update. The update is shown as a small step towards the center.

$$w(t+1) = w(t) - 0.03 \nabla L_{\mathcal{B}}(w(t))$$