

$$(a \leftarrow a - \eta \left(\frac{\partial \mathcal{L}(a, \boldsymbol{\Theta})}{\partial a} + \delta(a - z + \lambda)\right); \boldsymbol{\Theta} \leftarrow \boldsymbol{\Theta} - \eta \frac{\partial \mathcal{L}(a, \boldsymbol{\Theta})}{\partial \boldsymbol{\Theta}}) \Rightarrow (z \leftarrow \mathbf{prox}_h(a + \lambda))$$
"Optimizing" Step "Sparsifying" Step Multiplier Update