| Teacherpattern ξ^* | $\xrightarrow{\quad H(\sigma|\xi^*) \quad}$ | Ex |

| Data x with knownlabels y | |

Backwardpropagation

Figure 1: Comparison between a p-body Hopfield network in the teacher-student setting (top) and a dense neural network trained by Krotov (bottom). The top row shows how the network reconstructs an incomplete pattern ξ^b from the teacher pattern ξ^* by utilizing the examples σ, while the bottom row illustrates a dense neural network recovering the labels y' of the data x using the weights w learned from x.