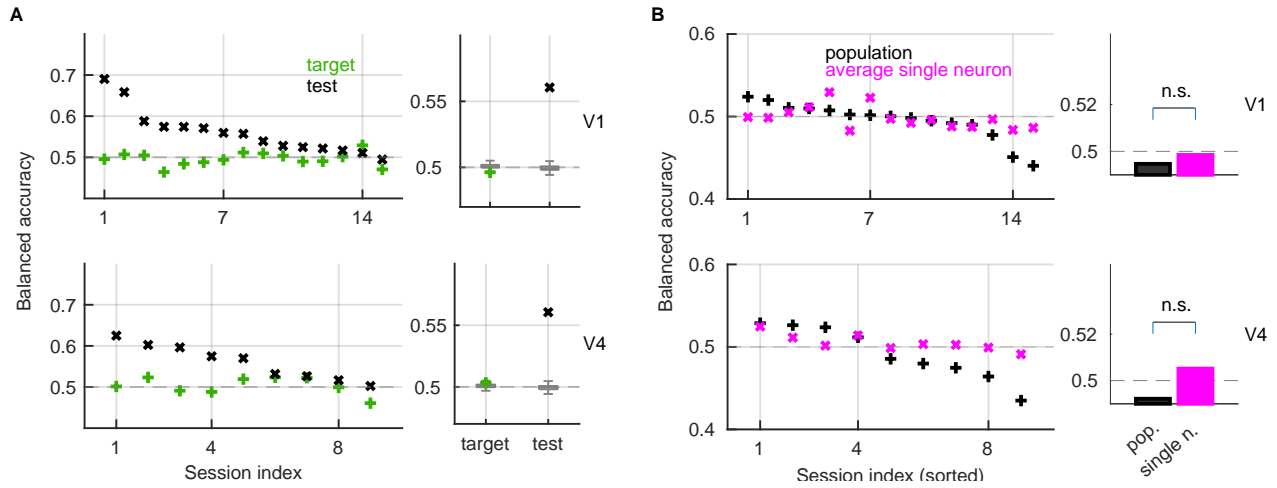


Supplementary fig. 1: Prediction accuracy of the SVM with RBF kernel and linear SVM during target time window.



A) Left: Prediction accuracy of nonlinear SVM with Radial-basis Function kernel during target (green) and test (black) time window. We show results in V1 (top) and in V4 (bottom). Results have been sorted, from best to worst balanced accuracy during test. Right: Session-averaged balanced accuracy and the distribution of results from models with permuted class labels (boxplots). **B)** Left: Prediction accuracy of the population model (black) and of the average single neuron (magenta) in V1 (top) and in V4 (bottom) during target. Results have been sorted with respect to the population model. Right: Average prediction accuracy across sessions for the population model (black) and for average single neuron model (magenta). Significance is estimated with the permutation test ($n_{perm} = 1000$.)