Supplementary Figure 1

Receptive field sizes of MT and MST neurons.

Histogram showing the distribution of receptive field diameters (in degrees of visual field) for neurons recorded in MT (green) and MST (blue).
Supplementary Figure 2

Additional measures of percentage of selective neurons.

Percentage of selective neurons with sensory selectivity (upright solid bars), and delay selectivity (inverted hashed bars) in MT (green), MST (blue) and LPFC (red), measured separately for each of the two monkeys (a,b), and measured with a one-factor ANOVA testing a significant main effect of motion direction on mean firing rates across each task period (c). (d) Percentage of selective neurons with delay selectivity measured excluding the first 240 ms (light colors) or 480 ms (dark colors) of the delay.
Supplementary Figure 3

Distribution of duration of discriminability across the population of recorded neurons.

Cumulative histograms showing the percentage of selective neurons in MT (green), MST (blue) and LPFC (red) that exceeded each duration of discriminability during the sample (a,b) and the delay (c,d) periods, measured for each neuron as the percentage of bins with significant discriminability (a,c) or as the maximum percentage of consecutive significant bins (b,d).
Supplementary Figure 4

Time course of delay period choice probability.

Mean choice probability (± standard error) across delay-selective neurons in MST (a) and LPFC (b) over time during the delay period. Horizontal axis shows time after sample offset. Dashed line shows chance level of choice probability.
Supplementary Figure 5

Direction discriminability of LFP power in MST and LPFC during the delay period.

(a,b) For each frequency band, percentage of LFP sites in MST (a) and LPFC (b) for which the LFP power auROC in the delay period was significantly higher than expected by chance. (c,d) Mean auROC (± standard error) among selective sites in MST (c) and LPFC (d).
Supplementary Figure 6

Randomized surrogate spike-field synchrony between LPFC and MT during the delay period.

(a) Randomized surrogate phase coherence between LPFC spikes and MT LFPs during the delay period (computed from data with shuffled trial labels) as a function of LFP frequency for all significantly coherent LPFC-MT pairs, sorted in the same order as in Fig. 8b.

(b) Percentage of coherent pairs for which the corresponding randomized surrogate coherence reached significance at each frequency. Frequency bands are color-coded.