

Supplementary Figure 1: Results of modified testbeds for identifying dimensions for two sets of variables (Section 6.2). (A) DCA shows low error (measured by angle of overlap) across many frequencies for non-orthonormalized β . The same testbed was used as that in Section 6.2, except that the columns of $\beta = [\beta_1, \ldots, \beta_5]$ were not orthonormalized. To ensure $\beta_i^T X \in [-\frac{\pi}{4}, \frac{\pi}{4}]$, each β_i was normalized to have a norm of 1. (B) DCA's performance decays gradually in the presence of additive Gaussian noise. The same testbed was used as that in Section 6.2, except that we corrupted Y with additive Gaussian noise: $Y = [\tilde{y}_1, \ldots, \tilde{y}_5]^T$, where $\tilde{y}_i = y_i + \sigma \epsilon$ and $\epsilon \sim \mathcal{N}(0, 1)$. We varied σ between 0 and 2.0. (C) CCA's performance decays in a similar manner as that of DCA. Same testbed as in (B).