



your_image_file_name.png

Figure 1: Alignments between singular subspaces of the observation $T = P + \frac{1}{\sqrt{N}}N$ and of the signal P , with $\|P\|_{\mathbb{F}}^2/\sigma_N = 10$, at initialization of Algorithm ?? (i.e., truncated MLSVD) and after the first iteration, as a function of the size of the tensor given by the parameter N . **Left:** $\frac{1}{r_\ell} \|X^{(\ell)\top} U_0^{(\ell)}\|_{\mathbb{F}}^2$. **Middle:** $\frac{1}{r_\ell} \|X^{(\ell)\top} U_1^{(\ell)}\|_{\mathbb{F}}^2$. **Right:** $(1 - \frac{1}{r_\ell} \|X^{(\ell)\top} U_1^{(\ell)}\|_{\mathbb{F}}^2) \times \sqrt{\sigma_N}$. **Experimental Setting:** $d = 3$, $(\frac{n_1}{N}, \frac{n_2}{N}, \frac{n_3}{N}) = (\frac{1}{6}, \frac{2}{6}, \frac{3}{6})$, $N = n_1 + n_2 + n_3$, and $(r_1, r_2, r_3) = (3, 4, 5)$.