Simulation	Signal Tensor $\Theta$	Rank	Sign Rank	$\alpha$	$ \mathcal{N} $	CDF of Tensor Entries	Noise
1	$\mathcal{C}  imes oldsymbol{M}_1  imes oldsymbol{M}_2  imes oldsymbol{M}_3$	$3^{3}$	$\leq 3^3$	$\infty$	$\leq 3^3$	1 0	Uniform $[-0.3, 0.3]$
2	$ oldsymbol{a}\otimes oldsymbol{1}\otimes oldsymbol{1}-oldsymbol{1}\otimes oldsymbol{a}\otimes oldsymbol{1} $	d	$\leq 3$	1	0	1 0	Normal $\mathcal{N}(0, 0.15)$
3	$\log(0.5 + Z_{\max})$	$\geq d$	2	$\infty$	d	0	Uniform $[-0.1, 0.1]$
4	$2.5 - \exp(\mathcal{Z}_{\min}^{1/3})$	$\geq d$	2	$\infty$	d		Normal $\mathcal{N}(0, 0.15)$
						-0.5 0 0.5 1	