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