Mapping to Our Problem

- $\Theta = \{(u, v) : u, v \in \mathbb{R}^n\}$

- w is the Gaussian distribution over Θ

- $\mathscr{P}_{(u,v)}$ is the distribution of $(\alpha/\sqrt{n}) \cdot Q^{(1)}(u \otimes v) + Q^{(1)} \cdot \mathrm{vec}(G)$

- By rotational invariance : $Q^{(1)} \cdot \mathrm{vec}(G) \sim N(0, I_t)$

- $\mathscr{P}_{(u,v)} = N(\mu = (\alpha/\sqrt{n}) \cdot Q^{(1)}(u \otimes v), \Sigma = I_t)$

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Main idea