

$$\mathbf{v}\left[\mathbf{k}\right]=V(k)+\sigma^*(2^{-d}\frac{4}{\pi}2^{2k}),\quad \mathbf{w}\left[\mathbf{k}\right]=W(k)+\sigma^*\left(2^{-d}\frac{1}{k!}\left(\frac{\pi}{2}\right)^k\right),$$