Flattening is an isometry from the coefficient tensor equipped with the sum-of-squares inner product to $\mathbb{R}^{24}$. For complex entries use $|X_{ijk}|^2 = \overline{X_{ijk}} X_{ijk}$. This is a Hilbert norm of coefficients; it is not generally the operator norm of the tensor interpreted as a multilinear map.

Comparative cost and preferred method

For N arbitrary entries, the default norm uses $\Theta(N)$ work, and every entry can affect the result, giving an $\Omega(N)$ input-reading lower bound. Flattening by a view avoids copying when the strides permit; a noncontiguous layout may require a copy. No complex-analytic speedup applies.