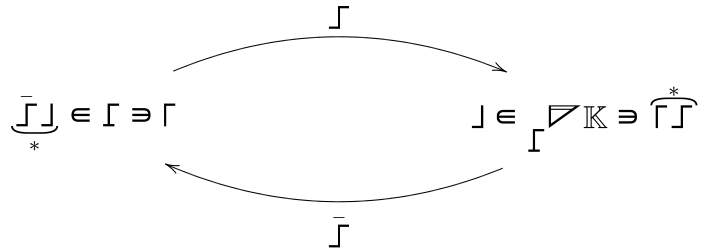
$$\overbrace{\sqrt{\ }\!+\!\sqrt{\ }\ \rfloor}^{-1}\underbrace{\rfloor\!+\!\sqrt{\ }\ \rfloor}_{\ulcorner\overbrace{\sqrt{\ }\!+\!\sqrt{\ }\ \rfloor}^{-1}}\Theta = {}^{\sqrt{\ }+\sqrt{\ }\ \rfloor}\mathcal{D}^{1/2}\, e^{\pi i \ulcorner \sqrt{\ } \overbrace{\sqrt{\ }+\sqrt{\ }\ \rfloor}^{-1}\ \ulcorner^{T}} {}^{\sqrt{\ }}_{\ulcorner}\Theta$$

$$\int_{d\ulcorner}^{\mathbb{R}_d} {}^{-\rfloor}_{\ulcorner}\mathcal{E}^{\ulcorner}\ {}^{-2}_{\ulcorner}\mathcal{E}^{\ulcorner} = \frac{\pi^{d/2}}{{}^{\rfloor}\mathcal{D}^{1/2}}\ {}^{-\bar{\rfloor}}_{\ulcorner}\mathcal{E}^{\ulcorner}$$

$$\underbrace{\ulcorner + \ulcorner\bar{\rfloor}}\ \bowtie\ \underbrace{\ulcorner + \ulcorner\bar{\rfloor}}\ \rfloor = \ulcorner \bowtie \ulcorner\ \rfloor + 2\ulcorner \bowtie \ulcorner + \underbrace{\ulcorner\bar{\rfloor}} \bowtie \ulcorner$$

$$\Rightarrow \text{ LHS } = {}^{-\bar{\rfloor}}_{\ulcorner}\mathcal{E}^{\ulcorner}\int_{d\ulcorner}^{\mathbb{R}_d} {}^{-\rfloor}_{\ulcorner + \ulcorner\bar{\rfloor}}\mathcal{E}^{\ulcorner + \ulcorner\bar{\rfloor}} \underset{\ulcorner = \ulcorner + \ulcorner\bar{\rfloor}}{=} {}^{-\bar{\rfloor}}_{\ulcorner}\mathcal{E}^{\ulcorner}\int_{d\ulcorner}^{\mathbb{R}_d} {}^{-\rfloor}_{\ulcorner}\mathcal{E}^{\ulcorner} = \text{ RHS}$$



$$\underbrace{\bar{\rfloor}\overbrace{\ulcorner\rfloor}^{*}}_{*} = \ulcorner: \quad \overbrace{\underbrace{\bar{\rfloor}\lrcorner}_{*}\rfloor}^{*} = \lrcorner$$

$$\mathbb{Z}_d \subset \lfloor: \quad {}_{\lfloor}\triangledown\mathbb{K} \supset {}^{d}\overbrace{2\pi i\mathbb{Z}}$$

$$ {}^{T}_{z}\mathbb{Z}^{d} = \frac{\pi^{d/2}}{{}^{T}\mathcal{D}^{\;1/2}} \mathcal{E}^{4\pi^2 z \bar{T} \maltese z} \; {}^{\bar{T}}_{2z\bar{T}} \underbrace{2\pi i\mathbb{Z}}_{d} $$

$$ \text{LHS} = \sum_{\lrcorner}^{\mathbb{Z}_d} \mathcal{E}^{-\lrcorner \overbrace{\lrcorner\lrcorner}^{*} + \lrcorner\lrcorner 2\pi i} = \sum_{\lrcorner}^{{}^{d}\overbrace{2\pi i\mathbb{Z}}} \int_{d\ulcorner}^{\mathbb{R}_d} \mathcal{E}^{-\ulcorner\lrcorner} \mathcal{E}^{-\ulcorner \overbrace{\ulcorner\lrcorner}^{*} + \ulcorner\lrcorner 2\pi i} = \sum_{\lrcorner}^{{}^{d}\overbrace{2\pi i\mathbb{Z}}} \int_{d\ulcorner}^{\mathbb{R}_d} \mathcal{E}^{-\ulcorner \overbrace{\ulcorner\lrcorner}^{*}} \mathcal{E}^{\ulcorner \underbrace{\lrcorner 2\pi i - \lrcorner}} $$

$$ = \frac{\pi^{d/2}}{{}^{T}\mathcal{D}^{\;1/2}} \sum_{\lrcorner}^{{}^{d}\overbrace{2\pi i\mathbb{Z}}} \mathcal{E}^{\left(\overbrace{\ulcorner\lrcorner}^{*} + \ulcorner\lrcorner 2\pi i\right)\left(\overbrace{\ulcorner\lrcorner}^{*} + \ulcorner\lrcorner 2\pi i\right)\bar{\lrcorner}} $$

$$ = \sum_{n}^{\mathbb{Z}^d} \mathcal{E}^{-nT\maltese n + 2\pi i z\maltese n} = \sum_{\nu}^{{}^{d}\underbrace{2\pi i\mathbb{Z}}} \int_{dy}^{\mathbb{R}^d} \mathcal{E}^{-y\nu} \mathcal{E}^{-yT\maltese y + 2\pi i z \maltese y} $$

$$ = \sum_{\nu}^{{}^{d}\underbrace{2\pi i\mathbb{Z}}} \int_{dy}^{\mathbb{R}^d} \mathcal{E}^{-yT\maltese y} \mathcal{E}^{-y\maltese(\nu + 2\pi i z)} = \frac{\pi^{d/2}}{{}^{T}\mathcal{D}^{\;1/2}} \sum_{\nu}^{{}^{d}\underbrace{2\pi i\mathbb{Z}}} \mathcal{E}^{-(\nu + 2\pi i z)\bar{T}\maltese(\nu + 2\pi i z)} $$

$$ = \frac{\pi^{d/2}}{{}^{T}\mathcal{D}^{\;1/2}} \mathcal{E}^{4\pi^2 z\bar{T}\maltese z} \sum_{\nu}^{{}^{d}\underbrace{2\pi i\mathbb{Z}}} \mathcal{E}^{-\nu\bar{T}\maltese\nu - 4\pi i z\bar{T}\maltese\nu} = \text{RHS} $$

$$ {}^{-\overset{-1}{\lrcorner}}_{\ulcorner\overset{-1}{\lrcorner}}\Theta = {}^{\lrcorner}\mathcal{D}^{1/2} \mathcal{E}^{\pi i \ulcorner \overset{-1T}{\lrcorner} \ulcorner} \; {}^{\lrcorner}_{\ulcorner}\Theta $$

$$ \underbrace{\ulcorner + \overbrace{\bar{\lrcorner}\lrcorner}^{*}} \; \overbrace{\underbrace{\ulcorner + \overbrace{\bar{\lrcorner}\lrcorner}^{*}}\lrcorner}^{*} $$