

$$\mathbb{C}^{1|1} \triangle_{\omega} \mathbb{C} = \frac{z|\zeta \eta = z_0 \eta + \zeta_1^z \eta}{0 \eta \in \mathbb{C} \triangle_{\omega} \mathbb{C} \ni 1 \eta}$$

$$\int_{d\zeta}^{\mathbb{C}^{0|1}} \bar{\zeta} \zeta = 1$$

$$\nu_{z|\zeta} = \frac{dzd\zeta}{\pi} \underbrace{-\nu z\bar{z} + \zeta\bar{\zeta}}_{\mathcal{E}} = \frac{dzd\zeta}{\pi} \underbrace{-\nu\zeta\bar{\zeta}}_{\mathcal{E}} \underbrace{-\nu z\bar{z}}_{\mathcal{E}} = \frac{dzd\zeta}{\pi} \underbrace{1 - \nu\zeta\bar{\zeta}}_{\mathcal{E}} \underbrace{-\nu z\bar{z}}_{\mathcal{E}}$$

$$\begin{aligned} \int_{dz/\pi}^{\mathbb{C}^{1|0}} \int_{d\zeta}^{\mathbb{C}^{0|1}} \underbrace{-\nu z\bar{z} + \zeta\bar{\zeta}}_{\mathcal{E}} &= \int_{dz/\pi}^{\mathbb{C}^{1|0}} \int_{d\zeta}^{\mathbb{C}^{0|1}} \underbrace{1 - \nu\zeta\bar{\zeta}}_{\mathcal{E}} \underbrace{-\nu z\bar{z}}_{\mathcal{E}} = \int_{dz/\pi}^{\mathbb{C}^{1|0}} \int_{d\zeta}^{\mathbb{C}^{0|1}} \underbrace{-\nu z\bar{z}}_{\mathcal{E}} - \nu \int_{dz/\pi}^{\mathbb{C}^{1|0}} \int_{d\zeta}^{\mathbb{C}^{0|1}} \underbrace{\zeta\bar{\zeta}}_{\mathcal{E}} \underbrace{-\nu z\bar{z}}_{\mathcal{E}} \\ &= 0 + \nu \int_{dz/\pi}^{\mathbb{C}} \underbrace{-\nu z\bar{z}}_{\mathcal{E}} = \nu \int_{2rdr}^{0|\infty} \int_{dt/2\pi}^{0|2\pi} \underbrace{-\nu r^2}_{\mathcal{E}} = \nu \int_{dq}^{0|\infty} \underbrace{-\nu q}_{\mathcal{E}} = \nu \left[\frac{-\nu q}{-\nu} \right]_{q=0}^{q=\infty} = - \left[-\nu q \right]_{q=0}^{q=\infty} = 1 \end{aligned}$$

$$z|\zeta \mathcal{P}_{w|\omega} = \nu \underbrace{z\bar{w} + \zeta\bar{\omega}}_{\mathcal{E}}$$

$$\begin{aligned} z|\zeta \mathcal{P}_{w|\omega} &= \sum_{0 \leq n} \underbrace{z^n \bar{w}^n}_{\mathcal{E}} + \sum_{0 \leq n} \underbrace{\zeta z^n \bar{\omega} w^n}_{\mathcal{E}} = \sum_{0 \leq n} \frac{\nu^n}{n!} z^n \bar{w}^n + \sum_{0 \leq n} \frac{\nu^{n+1}}{n!} z^n \zeta \bar{w}^n \bar{\omega} \\ &= \nu z\bar{w} \mathcal{E} + \nu \zeta \bar{\omega} \nu z\bar{w} \mathcal{E} = \underbrace{1 + \nu \zeta \bar{\omega}}_{\mathcal{E}} \nu z\bar{w} \mathcal{E} = \nu \zeta \bar{\omega} \mathcal{E} \nu z\bar{w} \mathcal{E} = \nu \underbrace{z\bar{w} + \zeta\bar{\omega}}_{\mathcal{E}} \mathcal{E} \end{aligned}$$

$$\mathcal{P}^{\nu} \mathbb{J} = P^{\nu} {}^{00} \mathbb{J} - \frac{1}{\nu} P^{\nu} {}^{11} \mathbb{J} + \zeta P^{\nu} {}^{10} \mathbb{J}$$

$$d\mu_{z|\zeta}^{\nu} = \frac{dzd\zeta}{\pi} \underbrace{1 - \nu\zeta\bar{\zeta}}_{\mathcal{E}} \underbrace{-\nu z\bar{z}}_{\mathcal{E}}$$

$$z|\zeta \mathcal{K}_{w|\omega}^{\nu} = \underbrace{1 + \nu\zeta\bar{\omega}}_{\mathcal{E}} \nu z\bar{w} \mathcal{E}$$

$$z|\zeta \overline{\mathcal{P}^{\nu} \mathbb{J}} = \int_{dw}^{\mathbb{C}^{1|0}} \int_{d\omega}^{\mathbb{C}^{0|1}} z|\zeta \mathcal{K}_{w|\omega}^{\nu} \mathcal{E} w|\omega \mathbb{J}$$

$$z \overline{P^{\nu} \mathbb{J}} = \int_{\nu dw/\pi}^{\mathbb{C}^{1|0}} \underbrace{-\nu w\bar{w}}_{\mathcal{E}} \nu z\bar{w} \mathcal{E} w \mathbb{J}$$

$$\int_{d\omega}^{\mathbb{C}^{0|1}} \underbrace{1 - \nu\zeta\bar{\zeta}}_{} \underbrace{1 + \nu\zeta\bar{\omega}}_{} \overbrace{^{00}\mathbb{J} + \omega^{10}\mathbb{J} + \bar{\omega}^{01}\mathbb{J} + \omega\bar{\omega}^{11}\mathbb{J}}^{} \\ = \int_{d\omega}^{\mathbb{C}^{0|1}} \underbrace{1 + \nu\zeta\bar{\omega} - \nu\zeta\bar{\zeta}}_{} \overbrace{^{00}\mathbb{J} + \omega^{10}\mathbb{J} + \bar{\omega}^{01}\mathbb{J} + \omega\bar{\omega}^{11}\mathbb{J}}^{} = \nu^{00}\mathbb{J} + \nu\zeta^{10}\mathbb{J} - {}^{11}\mathbb{J}$$

$$\Rightarrow {}^{z|\zeta}\overline{\mathcal{P}^\nu\mathbb{J}} = \int_{d\omega/\pi}^{\mathbb{C}^{1|0}} -\nu w\bar{\omega} \mathcal{E}^{\nu z\bar{\omega}} \mathcal{E} \overbrace{\nu^{00}\mathbb{J} + \nu\zeta^{10}\mathbb{J} - {}^{11}\mathbb{J}}^{}$$

$$= \int_{\nu d\omega/\pi}^{\mathbb{C}^{1|0}} -\nu w\bar{\omega} \mathcal{E}^{\nu z\bar{\omega}} \mathcal{E} \overbrace{^{00}\mathbb{J} + \zeta^{10}\mathbb{J} - \frac{1}{\nu}{}^{11}\mathbb{J}}^{} = {}^z\overline{P^{\nu 00}\mathbb{J}} - \frac{1}{\nu} {}^z\overline{P^{\nu 11}\mathbb{J}} + \zeta {}^z\overline{P^{\nu 10}\mathbb{J}}$$

$$\mathcal{P}^\nu \overline{{}_0\mathfrak{A} + \zeta_1\mathfrak{A}} = {}_0\mathfrak{A} + \zeta_1\mathfrak{A}$$

$$\text{LHS} = P^\nu {}_0\mathfrak{A} + \zeta P^\nu {}_1\mathfrak{A} = \text{RHS}$$

$$\mathfrak{A} = \sum_{0 \leq n} z^n a_n + \zeta z^n b_n = a_0 + \sum_{1 \leq n} z^n a_n + \zeta z^n b_n = a_0 + \sum_{1 \leq n} z^n a_n + \zeta z^n b_n$$

$$\mathbb{C}^{1|1} \xrightarrow[\cong]{} \mathbb{C} \xrightarrow{\mathcal{P}_n} \left\{ \begin{array}{l} (az + b\zeta)^n \\ a \in \mathbb{C} \ni b \end{array} \right\} = \mathbb{C}^{1|1} \xrightarrow[\cong]{} \mathbb{C}^n$$

$$S := \sum_{0 \leq n} (-1)^n \mathcal{P}_n \mathcal{S} ({}_0\mathfrak{A} + \zeta_1\mathfrak{A}) = S_0\mathfrak{A} - \zeta S_1\mathfrak{A}$$

$$S = \frac{S \mid 0}{0 \mid -S}$$

$$\mathfrak{A} = \sum_{0 \leq n} z^n a_n + \zeta z^n b_n = a_0 + \sum_{1 \leq n} z^n a_n + \zeta z^n b_n = a_0 + \sum_{1 \leq n} z^n a_n + \zeta z^n b_n$$