

$$y = \underline{0:\bar{\omega}} \Rightarrow \dot{y} - iy = \underline{\omega:\bar{0}} - i\underline{0:\bar{\omega}} = \underline{\omega:i\bar{\omega}}$$

$$\dot{x} + \dot{y} - y\dot{x}y = \underline{\dot{\zeta}:\dot{\zeta}} + \underline{0:\dot{\omega}} - \underline{0:\omega}\underline{\dot{\zeta}:\dot{\zeta}}\underline{0:\omega} = \underline{\dot{\zeta}:\dot{\zeta} + \dot{\omega} - \omega\dot{\zeta}\omega} = \dot{\zeta}:\dot{\omega} \left| \frac{I - P_\omega}{I} \right.$$

$$\begin{aligned} \int_{dz}^B z \Delta_z^{\nu-p} z \bar{\gamma} z \mathfrak{r} &= \gamma \mathfrak{r} \mathfrak{r} = (\nu)_\mu^{-1} \gamma \mathfrak{r} \mathfrak{r} \mathfrak{r} = (\nu)_\mu^{-1} \gamma \mathfrak{r} u_i^\mu u_i^\mu \mathfrak{r} \mathfrak{r} \\ &= (\nu)_\mu^{-1} \gamma \mathfrak{r} u_i^\mu u_i^\mu \mathfrak{r} \mathfrak{r} = (\nu)_\mu^{-1} \overline{u_i^\mu \mathfrak{r} \gamma u_i^\mu \mathfrak{r}} = (\nu)_\mu^{-1} \overline{\partial_{u_i^\mu} \gamma} \overline{\partial_{u_i^\mu} \mathfrak{r}} \end{aligned}$$

$$\mathbb{C}_{z\bar{w}}^{\bar{w}} \Delta_{z\bar{w}}^\nu \mathbb{C}_{w\bar{z}}^{\bar{z}} \Delta_{w\bar{z}}^{-\nu} = {}^z \mathcal{B}_w \text{ inv } G$$

$$\mathbb{C}_{z\bar{w}}^{\bar{w}} \Delta_{z\bar{w}}^\nu \mathbb{C}_{w\bar{z}}^{\bar{z}} \Delta_{w\bar{z}}^{-\nu} = \frac{\mathbb{C}_{z\bar{w}}^{\bar{w}} \Delta_{z\bar{w}}^\nu}{\mathbb{C}_{w\bar{z}}^{\bar{z}} \Delta_{w\bar{z}}^{\nu/2} \mathbb{C}_{z\bar{w}}^{\bar{w}} \Delta_{z\bar{w}}^{\nu/2}} = \frac{z \Delta_z^{\nu w} \Delta_w^\nu}{z \Delta_w^{\nu w} \Delta_z^\nu} = {}^z \mathcal{B}_w$$

$${}^z \overline{\mathfrak{g}_w \times \gamma} = \underbrace{{}^z {}_w B_w^{1/2}} u_i^\mu \overline{\partial_{u_i^\mu} \gamma}$$

$${}^z \gamma = z u_i^\mu u_i^\mu \mathfrak{r} \mathfrak{r} = z u_i^\mu \overline{\partial_{u_i^\mu} \gamma}$$

$${}^{z+w} \gamma = {}^z \overline{\mathfrak{t}_w \times \gamma} = z u_i^\mu \overline{\partial_{u_i^\mu} \mathfrak{t}_w \times \gamma} = z u_i^\mu \overline{\mathfrak{t}_w \times \partial_{u_i^\mu} \gamma} = z u_i^\mu \overline{\partial_{u_i^\mu} \gamma}$$

$${}^z \overline{\mathfrak{g}_w \times \gamma} = {}^z \mathfrak{g}_w \gamma = \underbrace{{}^z {}_w B_w^{1/2} + w} \gamma = \underbrace{{}^z {}_w B_w^{1/2}} u_i^\mu \overline{\partial_{u_i^\mu} \gamma}$$

$$\int_{dz}^D z \Delta_z^{\nu-p} z^{-1} \overline{\mathfrak{g}_z \times \mathfrak{f}}^z = \int_{dz}^D z \Delta_z^{-p} z \gamma z^{-1} \overline{\mathfrak{g}_z \times \mathfrak{f}}^z \overline{\mathfrak{g}_z \times \Delta_z^\nu} = \int_{dz}^D z \Delta_z^{\nu-p} z \gamma z^{-1} \int_{d\zeta}^D \zeta \Delta_\zeta^{\nu-p} \zeta \Delta_{-z}^{-\nu} \overline{\mathfrak{g}_z \times \mathfrak{f}}^z$$

$$\begin{aligned} \mathfrak{g}_w \Delta_{\mathfrak{g}_w}^\nu \mathfrak{g}_w \Delta_{\mathfrak{g}_w}^{-\nu} z \mathfrak{g}_w \Delta_{z \mathfrak{g}_w}^\nu &= \frac{\mathfrak{g}_w \Delta_{\mathfrak{g}_w}^\nu z \mathfrak{g}_w \Delta_{z \mathfrak{g}_w}^\nu}{\mathfrak{g}_w \Delta_{z \mathfrak{g}_w}^\nu z \mathfrak{g}_w \Delta_{\mathfrak{g}_w}^\nu} z \mathfrak{g}_w \Delta_{\mathfrak{g}_w}^\nu = \frac{\mathfrak{g}_w \Delta_{\mathfrak{g}_w}^\nu z \mathfrak{g}_w \Delta_{z \mathfrak{g}_w}^\nu}{\mathfrak{g}_w \Delta_{z \mathfrak{g}_w}^\nu z \mathfrak{g}_w \Delta_{\mathfrak{g}_w}^\nu} z \mathfrak{g}_w \Delta_{\mathfrak{g}_w}^\nu = z \Delta_z^\nu z \mathfrak{g}_w \Delta_w^\nu \end{aligned}$$

$$\zeta \mathfrak{g}_z \Delta_z = z \Delta_z \zeta \Delta_{-z}^{-1}$$

$$\text{LHS} = 1 \overline{\mathfrak{g}_z \times \mathfrak{f}}^z = 1 \overline{\mathfrak{g}_z \times \mathfrak{f}}^z = 1 \overline{\mathfrak{g}_z \times \mathfrak{f}}^z = 1 \overline{\mathfrak{g}_z \times \mathfrak{f}}^z = \overline{\mathfrak{g}_z \times \mathfrak{f}}^z P_\nu \overline{\mathfrak{f}}^z = \int_{dz}^D z \Delta_z^{\nu-p} z \gamma z^{-1} \overline{P_\nu \mathfrak{f}}^z$$

$$= \int_{dz}^D z \Delta_z^{\nu-p} z \gamma z^{-1} \int_{dw}^D w \Delta_w^{\nu-p} z \Delta_w^{-\nu} w \overline{\mathfrak{f}}^w = \int_{dz}^D z \Delta_z^{-p} z \gamma z^{-1} \int_{d\zeta}^D \zeta \Delta_\zeta^{-p} \underbrace{\mathfrak{g}_z \Delta_{\mathfrak{g}_z}^\nu \mathfrak{g}_z \Delta_{\mathfrak{g}_z}^{-\nu} \zeta \mathfrak{g}_z \Delta_{\zeta \mathfrak{g}_z}^\nu}_{= \zeta \Delta_\zeta^{\nu \zeta \mathfrak{g}_z \Delta_z^\nu} \zeta \mathfrak{g}_z \Delta_z^\nu} \overline{\mathfrak{g}_z \times \mathfrak{f}}^z$$

$$= \int_{dz}^D z \Delta_z^{-p} z \gamma z^{-1} \int_{d\zeta}^D \zeta \Delta_\zeta^{\nu-p} \overline{\mathfrak{g}_z \times \Delta_z^\nu} \zeta \overline{\mathfrak{g}_z \times \mathfrak{f}} = \text{RHS}$$

$$z \Delta_z^{-p} \underbrace{\eta_{\sharp} \bar{\eta}}_z = \int_{d\zeta} \zeta \Delta_\zeta^{\nu-p} \overbrace{\partial_{u_i^\mu} \left(\Delta_{-z}^{-p-w} \gamma \zeta^{-zw} B_{-z}^{1/2} u_i^\mu \zeta^{w-z} B_w^{1/2} + z \bar{\eta} \right)}^{-z}$$

$$\begin{aligned} \int_{dz} z \Delta_z^{\nu-p} z \bar{\eta} \underbrace{\eta_{\sharp} \bar{\eta}}_z z \mathbb{4} &= \int_{dz} z \Delta_z^{-p} z \gamma z \bar{\eta} \overbrace{\mathfrak{g}_z \times \bar{\eta}}_z \overbrace{\mathfrak{g}_z \times \Delta_z^\nu \mathbb{4}}_z \\ &= \sum_{\mu \subset \lambda \supset \nu} \int_{dz} z \Delta_z^{-p} z \gamma z \bar{\eta} \overbrace{\partial_{u_i^\mu} \bar{\eta}}_z \overbrace{\partial_{u_j^\nu} \mathbb{4}}_z \overbrace{\zeta_{-z}^{z B_z^{1/2}} u_i^\mu}_z \overbrace{\zeta_{-z}^{z B_z^{1/2}} u_j^\nu \zeta \mathfrak{g}_z \Delta_z^\nu}_z \\ &= \sum_{\mu \subset \lambda \supset \nu} \int_{dz} z \Delta_z^{\nu-p} z \gamma z \bar{\eta} \overbrace{\partial_{u_i^\mu} \bar{\eta}}_z \overbrace{\partial_{u_j^\nu} \mathbb{4}}_z \overbrace{\zeta_{-z}^{z B_z^{1/2}} u_i^\mu}_z \overbrace{\zeta_{-z}^{z B_z^{1/2}} u_j^\nu \Delta_{-z}^{-\nu}}_z \end{aligned}$$

$$\int_{dz} z \Delta_z^{\nu-p} z \gamma z \bar{\eta} \int_{d\zeta} \zeta \Delta_\zeta^{\nu-p} \zeta \Delta_{-z}^{-\nu} \overbrace{\mathfrak{g}_z \times \bar{\eta} \mathbb{4}}^\zeta$$

$$= \int_{d\zeta} \zeta \Delta_\zeta^{\nu-p} \int_{dz} z \Delta_z^{-p} z \gamma z \bar{\eta} \overbrace{\partial_{u_i^\mu} \Delta_z^\nu \mathbb{4}}_z \overbrace{\zeta_{-zz}^{z B_z^{1/2}} u_i^\mu \zeta^{-zz} B_z^{1/2} + z \bar{\eta}}^{-z}$$

$$\int_{dz} z \Delta_z^{-p} z \gamma z \bar{\eta} \overbrace{\partial_{u_i^\mu} \Delta_z^\nu \mathbb{4}}_z \overbrace{\zeta_{-zz}^{z B_z^{1/2}} u_i^\mu \zeta^{-zz} B_z^{1/2} + z \bar{\eta}}^{-z} = (-\nu)_\lambda \int_{dz} z \Delta_z^{-p} z \gamma z \bar{\eta} z \bar{u}_k^\lambda \overbrace{\partial_{u_i^\mu} u_k^\lambda \mathbb{4}}_z \overbrace{\zeta_{-zz}^{z B_z^{1/2}} u_i^\mu \zeta^{-zz} B_z^{1/2} + z \bar{\eta}}^{-z}$$

$$= (-\nu)_\lambda \int_{dz} z u_k^\lambda z \mathbb{4} \overbrace{\partial_{u_i^\mu} \left(\Delta_w^{-p-w} \gamma^{-w} \bar{\eta}^{-w} \bar{u}_k^\lambda \zeta^{ww} B_w^{1/2} u_i^\mu \zeta^{ww} B_w^{1/2} - w \bar{\eta} \right)}^{-z}$$

$$= (-\nu)_\lambda \int_{dz} z u_k^\lambda z \bar{u}_k^\lambda z \bar{\eta} z \mathbb{4} \overbrace{\partial_{u_i^\mu} \left(\Delta_{-z}^{-p-w} \gamma \zeta^{-zw} B_{-z}^{1/2} u_i^\mu \zeta^{w-z} B_w^{1/2} + z \bar{\eta} \right)}^{-z}$$

$$= \int_{dz} z \Delta_z^\lambda z \bar{\eta} z \mathbb{4} \overbrace{\partial_{u_i^\mu} \left(\Delta_{-z}^{-p-w} \gamma \zeta^{-zw} B_{-z}^{1/2} u_i^\mu \zeta^{w-z} B_w^{1/2} + z \bar{\eta} \right)}^{-z}$$

$$\zeta^{w-z} B_w^{1/2} + z = \left(z^{-w} + \zeta^w \right)^{-z} B_w^{1/2}$$

$${}^0\overline{\gamma_{\#}\bar{\eta}} = \int_{dz}^D \zeta \Delta_{\zeta}^{\nu-p} {}^{-\zeta}\gamma^{\zeta}\bar{\eta}$$

$${}^0\overline{\gamma_{\#}\bar{\eta}} = \int_{d\zeta}^D \zeta \Delta_{\zeta}^{\nu-p} {}^0\overline{\partial_{u_i^{\mu}} {}^{-w}\gamma^{\zeta} u_i^{\mu} \bar{\eta}}$$

$${}^0\overline{\partial_{u_i^{\mu}} {}^{-w}\gamma^{\zeta} u_i^{\mu} \bar{\eta}} = \zeta u_i^{\mu} {}^0\overline{\partial_{u_i^{\mu}} {}^{-w}\gamma^{\zeta} \bar{\eta}} = \zeta u_i^{\mu} {}^w u_i^{\mu} \bar{\eta} \underbrace{{}^{-w}\gamma^{\zeta} \bar{\eta}} = \underbrace{{}^w u_i^{\mu} \zeta \bar{u}_i^{\mu} \bar{\eta}} \underbrace{{}^{-w}\gamma^{\zeta} \bar{\eta}} = {}^w \epsilon_{\zeta} \bar{\eta} \underbrace{{}^{-w}\gamma^{\zeta} \bar{\eta}} = {}^{-\zeta}\gamma^{\zeta} \bar{\eta}$$

$${}^0\overline{\mathcal{B}\bar{\eta}} = c_{\lambda} \underbrace{u_{\ell}^{\lambda} \bar{\eta}} \underbrace{\bar{\eta} u_{\ell}^{\lambda}}$$

$${}^0\overline{\#K^{\lambda}} = c_{\mu} {}^w u_i^{\mu} \bar{\eta} \underbrace{{}^{z^w} K_{-w}^{\lambda} \bar{\eta} u_i^{\mu}}$$

$$\begin{aligned} {}^0\overline{\#K^{\lambda}} &= {}^0\overline{u_{\ell}^{\lambda} \bar{u}_{\ell}^{\lambda}} = c_{\mu} \underbrace{u_{\ell}^{\lambda} \bar{u}_j^{\nu}} \underbrace{u_i^{\mu} \bar{\eta} \underbrace{{}^{-w} u_{\ell}^{\lambda} {}^{z^w} u_j^{\nu} \bar{\eta} u_i^{\mu}}}} \\ &= c_{\mu} \underbrace{{}^w u_i^{\mu} \bar{\eta} \underbrace{{}^{-w} u_{\ell}^{\lambda} {}^{z^w} u_{\ell}^{\lambda} \bar{\eta} u_i^{\mu}}}} = c_{\mu} {}^w u_i^{\mu} \bar{\eta} \underbrace{{}^{z^w} u_{\ell}^{\lambda} \bar{u}_{\ell}^{\lambda} \bar{\eta} u_i^{\mu}} = c_{\mu} {}^w u_i^{\mu} \bar{\eta} \underbrace{{}^{z^w} K_{-w}^{\lambda} \bar{\eta} u_i^{\mu}} \end{aligned}$$

$${}^{z\bar{w}}\mathbb{C}\Delta_{w\bar{z}}^{-\nu/2} = {}^z\Delta_w^{-\nu} = \sum_{\mu} (\nu)_{\mu} {}^z K_w^{\mu} = \sum_{\mu} (\nu)_{\mu} {}^{z\bar{w}}\mathbb{C}K_{w\bar{z}}^{\mu/2}$$

$${}^0\overline{\mathcal{B}_{\mathbb{C}} K^{\mu}} = \frac{1}{(\nu)_{\mu}} d_{\mu}$$

$$\text{LHS} = \int_{dz}^D {}^z\Delta_z^{\nu} {}^z K_z^{\mu} = \int_{dz}^D {}^z\Delta_z^{\nu} {}^z u_i^{\mu} {}^{z\bar{w}} \bar{u}_i^{\mu} = u_i^{\mu} \bar{\eta} u_i^{\mu} = \frac{1}{(\nu)_{\mu}} u_i^{\mu} \bar{\eta} u_i^{\mu} = \text{RHS}$$

$${}^0\overline{AK^\lambda} = P \overline{\overline{w}}^{z^w} \overline{K_{-w}^\lambda} \overline{\overline{z}} Q$$

$$\begin{aligned} {}^0\overline{AK^\lambda} &= {}^0\overline{Au_\ell^\lambda \overline{u_\ell^\lambda}} = \overline{u_\ell^\lambda} \overline{\overline{u_j^\nu}} \overline{z} \overline{P} \overline{\overline{z}} \overline{u_i^\mu} \overline{t} \overline{\partial_{u_i^\mu}} \overline{w} \overline{u_\ell^\lambda} \overline{z^{-w}} \overline{u_j^\nu} \overline{\overline{z}} \overline{Q} = \overline{z} \overline{P} \overline{\overline{z}} \overline{u_i^\mu} \overline{t} \overline{\partial_{u_i^\mu}} \overline{w} \overline{u_\ell^\lambda} \overline{z^{-w}} \overline{u_\ell^\lambda} \overline{\overline{z}} \overline{Q} \\ &= \overline{z} \overline{P} \overline{\overline{z}} \overline{u_i^\mu} \overline{t} \overline{\partial_{u_i^\mu}} \overline{z^{-w}} \overline{u_\ell^\lambda} \overline{w} \overline{u_\ell^\lambda} \overline{\overline{z}} \overline{Q} = \overline{z} \overline{P} \overline{\overline{z}} \overline{u_i^\mu} \overline{t} \overline{\partial_{u_i^\mu}} \overline{z^{-w}} \overline{K_w^\lambda} \overline{\overline{z}} \overline{Q} = \overline{P} \overline{\overline{u_i^\mu}} \overline{u_i^\mu} \overline{\overline{w}}^{z^w} \overline{K_{-w}^\lambda} \overline{\overline{z}} \overline{Q} = \overline{P} \overline{\overline{w}}^{z^w} \overline{K_{-w}^\lambda} \overline{\overline{z}} \overline{Q} \end{aligned}$$

$${}^0\overline{\#K^\lambda} = \sum_{\mu} w u_i^\mu \overline{\overline{g_w}} \overline{\overline{u_\ell^\lambda}} \overline{\overline{z}} \overline{u_i^\mu} w u_\ell^\lambda = \sum_{\mu} w u_i^\mu \overline{\overline{z^{-w}}} \overline{K_w^\lambda} \overline{\overline{z}} \overline{u_i^\mu} = \sum_{\mu \supseteq \lambda} w u_i^\mu \overline{\overline{z^{-w}}} \overline{K_w^\lambda} \overline{\overline{z}} \overline{u_i^\mu} = \sum_{\mu} \overline{z} \overline{K_w^\mu} \overline{\overline{z^{-w}}} \overline{K_w^\lambda}$$